Thinking in the Thirties

In his presidential address at the 1930 meeting in Los Angeles, T. H. Ferguson observed:

No one can really appreciate to the full just what the American Veterinary Medical Association means to the veterinary profession of this country, unless he has had an opportunity to gain first-hand information concerning the business of the Association, its contacts, and its ramifications. If more veterinarians could have this opportunity, and would take advantage of it, our resident secretaries would not have such a hard time securing new members, and there would be dispelled any doubt that might remain in the minds of any of our members as to the desirability, not to mention the necessity, for increasing our income.

PROFESSIONAL ETHICS AND PUBLIC RELATIONS

Ward Giltner reported that the American Association for the Advancement of Science had requested the AVMA to prepare the program for the Section on Medicine for the AAAS meeting at Des Moines in 1929. The program, which "favorably presented veterinary medicine to the general public and to science in general," included such notables as J. R. Mohler, M. C. Hall, J. G. Hardenbergh, P. A. Fish, C. H. Stange, W. H. Feldman, A. F. Schalk, I. F. Huddleson, C. P. Fitch, W. L. Boyd, and B. T. Simms. The audience, however, consisted primarily of the speakers and the staff of Iowa State:

There is one thing that is very evident and that is that the medical profession is not particularly interested in our problems. . . . The people to whom these papers should have been directed were not in attendance.

A one-paragraph report of the meeting in *Science* offers a valid résumé of some of the concepts presented:

Because of the number of animal diseases which may be transmitted to man, veterinary medicine is a necessary factor in the care of the public health... For the control of these diseases public health officers and veterinarians must work together. Veterinarians contributed largely to the health of the army during the World War by careful inspection of all meat, milk and their products before consumption. The importance of continued study of the parasites of man and the lower animals was emphasized... Veterinary parasitology is daily becoming of greater importance.

Papers presented at the Los Angeles meeting included those on pathology museums by W. H. Feldman; rabies vaccine by R. A. Kelser; fur farm problems by J. E. Shillinger; liver fluke investigations by J. N. Shaw; swine erysipelas by Hadleigh Marsh; bull fertility by C. R. Donham and B. T. Simms; bovine cervicitis by H. E. Kingman, Sr.; and avian coccidiosis by H. J. Stafseth.

The Good Old Days

Writing in *Veterinary Medicine* in 1930, the sharp-witted E. T. Baker offered some

pointed remarks about "the veterinary supply house," for the benefit of those who perhaps still talked longingly of "them good old days":

In those days, the veterinary practitioner had to work out his own salvation. Several of the larger pharmaceutical houses devoted a few pages in their catalogs to veterinary supplies, which they kindly sold to the stockman or layman at the same price charged veterinarians. Blackleg biologics were distributed by the government as freely as garden seeds, and they also compiled several veterinary textbooks on horses and cattle to help obviate the need of the services of the graduate practitioner. In fact, it has been only within the past few years they learned of the existence of the private practitioner.

Proprietary medicines were sold in every country store, and later on, distributed from wagons or autos by agents. County agents, in their endeavors to save the country, jumped in bravely with hypodermic syringes and offered all kinds of free treatment. . . At the present time the private practitioner has these weapons to fight with: His individual business acumen; his bank account; enough clients with sufficient live stock; veterinary magazines; associations, and supply houses.

We cannot over value the ethical supply house, for it supplies us with the very sinews of practice. It helps us keep a jump or two ahead of the handy stock man who has received a short course at his state college and who is a full-fledged quack. We only wish we had enough business to patronize all the ethical supply houses.

T. H. Ferguson

Thomas H. Ferguson was born in Linn, Wisconsin, August 18, 1873, near Lake Geneva, the community he served for over 60 years. He graduated from the Ontario Veterinary College in 1896 and returned to Lake Geneva where he established a general practice and became a leader in community affairs. He was a member of the state examining board for many years, president of the Wisconsin VMA in 1911, and in 1929 was elected president of the AVMA, the fiftieth man to hold this position.

Dr. Ferguson's skill in veterinary surgery was internationally recognized; he appeared on programs throughout the United States and Canada – perhaps more times

than any other surgeon in history — and for many years no AVMA clinic was considered complete without a demonstration by him. In 1938 he was given the golden key of the AVMA, and in 1946 the Twelfth International Veterinary Congress award. One of his sons was associated with him in practice for 30 years, and another became a physician. Dr. Ferguson died at Lake Geneva on October 12, 1957, at the age of 84 — after a career which few have equalled and none excelled.

1931

In his presidential address at the meeting in Kansas City in 1931, M. C. Hall outlined an aggressive policy for the veterinary profession:

a continuing, comprehensive and constructive policy looking towards the sound development of veterinary medicine in the future . . . toward the attainment of the status by the veterinary profession of a learned profession.

Included in his recommendations were a survey of undeveloped areas and activities for veterinary services, increased participation in public health work, civil service status for state veterinarians, a code of ethics "worded in constructive terms of things to be worked for," closer affiliation with groups having mutual interests, adequate financial returns for practitioners, and "an open mind on the subject of state medicine."

For the colleges, Dr. Hall suggested greater flexibility of the curriculum keyed to immediate and forseeable needs of the profession, more emphasis on the conference method of instruction to "assist in developing future leaders," and an enlarged scope of cultural preparatory studies. For the practitioner, he urged, "more cooperation and less competition by the establishment of more partnerships and clinics"; cooperation with county agents in disease prevention; and increased publication of case reports. And "We [should] give our financial support to commercial houses that conduct an ethical business."

At the governmental level he proposed a general officer for the Veterinary Corps,

and an entering rank as first lieutenant; a keener interest of the AVMA in federal and dominion veterinary service, with:

steps to develop . . . statistical services for providing accurate information as to . . . animal diseases in North America . . . [and] that closer cooperation be developed . . . [with] the practicing veterinarian.

The AVMA itself, Dr. Hall urged, should admit, not exceeding 20 per cent of the active membership "persons having a doctorate degree in medicine, science, or philosophy." It should also make provisions "for a form of organization under which the business affairs of the Association shall be transacted by a small representative body."

A committee consisting of B. T. Simms, T. H. Ferguson, and O. V. Brumley was appointed to consider Dr. Hall's program; their recommendation, adopted later during the meeting, called for formulating detailed plans for implementing these policies. That Dr. Hall's proposals were sound is evident from the fact that, except for admission of nonveterinarians, practically every point has been adopted in one form or another.

The Executive Board recommended moving the AVMA offices from Detroit to Chicago "using rented quarters in Chicago until such time as it is deemed advisable to build or purchase a home." This move was made in 1932. Regarding a suggestion in 1959 that the still-rented AVMA offices in Chicago be vacated in favor of Kansas City, a dissenter countered: "What about Denver, or Florida, or the West Coast, where visitors to the executive offices can combine a little pleasure with their business?"

Kurt Wagener of Berlin presented papers on foot-and-mouth disease and vesicular stomatitis. Other topics included: dog diets by C. F. Schlotthauer; pullorum disease by A. J. Durant, and by H. C. H. Kernkamp; sheep pneumonia by I. E. Newsom and Floyd Cross; anesthesia by E. R. Frank; baby pig anemia by Robert Graham and Frank Thorp, Jr.; anthrax by N. F. Williams; several on brucellosis by C. F. Clark, C. R. Donham, C. P. Fitch, and F. B.

Hadley; lamb diseases by Hadleigh Marsh; salmon poisoning by B. T. Simms; and virus diseases of fowls by C. A. Brandly.

Head Count

An extensive survey by the Committee on Education shows that in 1931 there were approximately 12,240 veterinarians in the United States, about 1,200 fewer than in 1920. Of these, 76.5 per cent were in practice; 11.6 per cent in federal and 5.3 per cent in state service; teaching, commercial, and municipal work accounted for about 2 per cent each, and Army 1 per cent. At this time only 35 per cent of the total number of veterinarians were graduates of existing schools. The estimated number of nongraduate practitioners was about 2,800, about 19 per cent of the total. The average age of veterinarians was 43 years, and a conspicuous trend toward fewer very young graduates was noted. It was estimated that 400 new students - of which only 300 would graduate if current figures continued to prevail - would be needed annually if the total number of veterinarians was to be maintained. This would require doubling the average attendance (709) for the decade ending with 1930, or nearly tripling that which prevailed during the mid-twenties.

The distribution of the veterinary population was closely correlated $(.89\pm0.02)$ with the value of cattle, less so with horses and swine. A sampling of 608 practitioners in eleven states showed the following percentages of time devoted to the several species: cattle 38, small animals 24, horses 19, swine 14, poultry 3, sheep 2. The amount of time expended on cattle and horses was closely related to the percentage of valuation; the percentage valuation of poultry and sheep, however, was nearly four times the percentage of time devoted to them; conversely the time devoted to swine was three times its percentage valuation. The earnings of 417 practitioners in eleven states ranged from \$600 to \$25,000, with a median of just over \$4,000; the highest quarter averaged just over \$8,000; the lowest just over \$2,000. At this time BAI salaries averaged \$2,800, teaching salaries \$3,500.

In an editorial on "State Medicine" in 1931, Dr. Hall notes the objections voiced by the American Medical Association, and observes:

There are various reasons why the veterinary profession as a whole should not take sides in this matter, especially at this time...a majority vote of the American Veterinary Medical Association could represent only a majority of persons having certain opinions, a sterile procedure unless the Association contemplated a program of active support for or hostility to state medicine.

Noting that the veterinary profession was already considerably involved in state medicine, largely through the BAI, he considers:

By and large our reactions to the advantages and disadvantages of state medicine and private enterprise will be determined by our interest in life, or temperaments, and our training and education. . . . It behooves the veterinary profession to keep an open mind on the matter of state medicine and to avoid committing our profession to a stand on this subject, regardless of our individual opinions.

Hallmark of Ethics

Writing on "Ethics in Veterinary Medicine." Dr. Hall observes:

We must have a code and . . . it presents difficulties in formulation, interpretation and application, [thus] it is worth while to examine our code from time to time, to refresh our memory as to its provisions, to consider its limitations, and perhaps to modify it.

At the time (1931), the Code of Ethics contained six provisions, to each of which Dr. Hall offers some pointed suggestions:

- 1. All members are expected to conduct themselves at all times as professional gentlemen: "The word gentleman itself has fallen on hard times and has not the generally accepted meaning it once had. . . . Many men feel that there is more honor in being known as a man than as a gentleman."
- 2. No member shall assume an academic title or degree which has not been conferred upon him by an institution of learning in good standing: "To violate this provision of the code would stamp a man as dumb, rather than unethical."

- 3. No member shall attempt to undermine or injure the professional standing of another by unfairly or unnecessarily criticizing his professional work: "Where is the borderline between fair and necessary criticism and unfair and unnecessary criticism . . . and to what extent is the public entitled to protection against incompetency?" [These three sections remained essentially unchanged to 1960.]
- 4. In consultation cases the veterinarian in attendance must give the opinion of the consultant to the client in the presence of all three, or the consultant transmit it in writing to the client through the attending veterinarian, and the consultant must not revisit the patient except by invitation from or by agreement with the attending veterinarian: "The ethical concept here does not seem as lofty as might be wished. . . . A sound ethic would contemplate rather specifically the preservation of the rights of all parties concerned, including the veterinarians, the clients and the patients." [On consultations, the Code of Ethics in force in 1960 was greatly expanded; but the only "protecoffered to clients was "to assure the client's confidence in veterinary medicine."]
- 5. [Regarding advertising]: "The provisions of this section are quite habitually violated. . . . The question may be raised as to whether . . . the section should be repealed on the theory that dead things should be buried."
- 6. [Regarding secret remedies]: "There is no doubt but what some veterinarians in practice keep to themselves useful findings. . . . As far as disciplinary action is concerned, probably little can be done. . . . The remedy will lie in the development of a personnel from future veterinary students who appreciate that almost all they have of knowledge they owe to the living and dead who gave it to them."
- 7. Charges against members for unethical conduct must be presented to the Executive Board: "The code is mostly a statement of things unethical and forbidden. . . . It is too negative and lacks the stimulating value of positive and constructive statement. Perhaps it is time to write a new code or in some other way to keep before our veterinary students and the profession the positive and constructive ideas of honesty, integrity, courtesy, courage, tolerance, kindliness, thoughtfulness and good sportsmanship as the summation of ethics. . . . In fact the code savors too strongly of the police. . . . There is less value in the language of the police court than in these words of Paul: 'Whatsoever things are true, whatsoever things are honorable, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report; if there be any virtue, and if there be any praise, think on these things."

While the Code of Ethics had been ammended from time to time since its first adoption in 1866, few changes in fundamental philosophy had been made. However, additions to it—spelling out what constituted violations—had by the late 1950's converted the relatively simple code of 1866 (about 250 words) into a complex two-page document in fine print. In 1960 a completely restated and compact version of the Code of Ethics was presented, emphasizing that:

exemplary professional conduct not only upholds honor and dignity, but also enlarges our sphere of usefulness, exalts our social standards, and promotes the science we cultivate.

M. C. Hall

Maurice Crowther Hall was born at Golden, Colorado, July 15, 1881, and was educated at Colorado College (B.S., 1905), University of Nebraska (M.A., 1906), and George Washington University (Ph.D., 1915; D.V.M., 1916). He worked for the BAI from 1907 to 1916 when he became a research parasitologist at Parke, Davis & Co. He served in the Veterinary Corps (1918–1919), following which he returned to the BAI, and on the death of B. H. Ransom in 1925, became Chief of the Zoological Division. By 1930 he had published nearly 300 papers, mostly on parasitology and anthelmintics. His discovery of carbon tetrachloride as a remedy for hookworm was a major contribution to public health.

Dr. Hall, who was elected AVMA president in 1930, also wrote in the field of the social and economic aspects of science, some of these papers being recognized as classics of style. He was proficient in nine languages. While he is remembered most widely for his hookworm remedy, perhaps of greater significance is the fact that largely through his efforts, veterinary parasitology was rescued from near oblivion. He died May 1, 1938.

Long an advocate of more attention being given to his specialty, in commenting on "The College Course in Veterinary Parasitology," Dr. Hall had observed in 1922:

It will probably be conceded by most American veterinarians that there is no topic in veterinary medicine concerning which the veterinarian is less informed than the subject of parasitology. . . . This is not the fault of the veterinarian or of the veterinary colleges. It is the natural and inevitable historical result of past and present conditions in this country. Since the establishment of the comparatively new science of bacteriology, the engaging study of bacteria and of diseases caused by them had dominated the attention of the veterinarian more or less to the exclusion of the study of animal parasites. The diseases due to bacteria and the filtrable viruses are spectacular and demand attention. . . . The animal parasites are not so spectacular. . . .

For the most part, parasitology in this country has been neglected by the American veterinarian and regarded as a minor and comparatively unimportant topic by our veterinary colleges. . . The sacrificial goat could volunteer or be drafted; someone must teach parasitology, not because of its interest and importance, but to avoid leaving a gap in the curriculum . . . anyone who would or must teach parasitology.

On the status of "Veterinary Parasitology in the United States," Dr. Hall claimed in 1929:

Parasitic diseases are approximately as important as bacterial diseases. The bacterial diseases are spectacular, but they are more or less sporadic . . . parasites are ubiquitous and most of them are present throughout the year and every year. . . . Before the livestock industry can be relieved of many of the losses which it now suffers from parasites, it will be necessary to make extensive surveys to ascertain what parasites are present in this country and where they are prevalent, to work out the life histories of these parasites, to ascertain their habits, to develop effective treatments and to devise satisfactory prophylactic measures to prevent future losses. With the number of men now engaged in the study of veterinary parasitology in this country it would probably be a matter of centuries to secure satisfactory answers to these questions.

1932

At the 1932 meeting in Atlanta, President R. R. Dykstra called for a positive publicity program, observing:

Having had a lowly beginning, the veterinary profession is still made the victim of a type of publicity that is very difficult to contend with. He mentions a motion picture which "portrays the veterinarian on a plane far lower than the oldtime illiterate horse doctor," and on protest was told "they had to have a villain, and the veterinarian fitted into their scheme of things."

And in answer to a protest over an insurance company advertisement lauding the medical profession for controlling tuberculosis, but making no mention of the veterinary profession, the president of the company:

stated that he was aware of the services of the veterinarian in the control work in regard to tuberculosis, but the veterinarian still lacked popular appeal, and their advertisements were written with the primary objective of getting the public to read them.

As positive measures for securing deserved recognition, Dr. Dykstra suggests that the USDA identify its veterinarians as "veterinary inspectors" in press releases. Also:

veterinarians in public positions should take every opportunity to appear in a professional capacity before the public. . . . Veterinarians in private practice . . . should not miss an opportunity to present their profession in the various service clubs. . . . There are many organizations of women's clubs that are intensely desirous of increasing their knowledge about meat and milk inspection . . . [and] veterinarians have been able to obtain a very high grade of publicity by the publication of carefully worded articles in the agricultural and lay press.

As something of an innovation, he suggests:

The national organization, the state organizations, or possibly our veterinary schools, should at once proceed to obtain phonographic records in which leaders of the veterinary profession would leave an indelible record, in their own words, of some of their activities which, in a measure, have been instrumental in placing the profession in its present more or less enviable, though little known, position. If we had records by phonographic Law, Dalrymple, and a large host of others who have passed to the great beyond, how invaluable these would be for the education of our embryonic veterinarians. We should no longer delay obtaining such records from those who are still with us.

In concluding with the admonition: "We should strengthen our morale by a faith in veterinary medicine based upon its high accomplishments." Dr. Dykstra states, "It will do us all good to renew our allegiance to that unofficial code of ethics formulated some time ago by an unknown writer:

To regard my profession as something more than a means of livelihood;

To value character more highly than reputation and truth above popularity;

To be merciful and humane, preventing needless suffering among dumb beasts;

To be faithful and zealous, preventing needless loss to those I am called on to serve;

To guide my conduct by sober judgement and my judgement by a never-sleeping conscience; To be modest and open-minded and thankful for every opportunity to increase my knowledge and usefulness;

To be a co-worker with my fellow practitioners by the mutual interchange of counsel and assistance;

To be true to myself, measuring my own success by the value of the service I render rather than by the fee I receive."

In the first Section on Military Medicine, with D. M. Campbell as chairman, papers were presented by Major R. A. Kelser on improvements in the Army veterinary service; L. A. Merillat on "Reminicscences of the World War"; and N. S. Mayo on "Some Lessons of Peace." In the Section on Small Animal Practice, papers were presented on canine diabetes by H. J. Milks; operative care of small animals by C. F. Schlotthauer; canine distemper by A. S. Schlingman; and intravenous therapy by E. J. Frick.

Other presentations included those on acid-fast bacilli by W. A. Hagan and P. P. Levine; erogtism of cattle by J. W. Lumb; agglutination tests for Bang's disease by C. P. Fitch and C. R. Donham; hepatitis of swine by A. H. Quin; foal diseases by W. W. Dimock and P. R. Edwards; acute mastitis by R. B. Little and F. S. Jones; and pathology of Johne's disease by E. T. Hallman and J. F. Witter.

The AVMA offices, which had been moved from Detroit to the Prairie Farmer Building in Chicago, two miles west of the Loop, proved to be inconveniently located and were moved to LaSalle Street. Earlier,

Secretary Hoskins had noted, "We were not getting the callers we wanted to see, and were getting too many that we did not want to see." He also reported that the AVMA library, which had consisted of one book when he took office in 1922, presently contained some 350 bound volumes. And on the AVMA emblem, the inappropriateness of which had been pointed out by J. M. Arburua: "It is quite likely that we will want to study the advisability of making some change."

R. R. Dykstra

Ralph R. Dykstra was born at Groningen, Holland, in 1879, and came to the United States at the age of two. He grew up in northwestern Iowa, studied pharmacy, and after several years in the drug business began veterinary studies at Iowa State, graduating in 1905. He joined the staff at Iowa State becoming Professor of Comparative Anatomy and Obstetrics in 1909. In 1911 he went to Kansas State and became head of the Department of Surgery and Medicine in 1913. In 1917 he was appointed dean at Kansas State, which position he held until his retirement in 1948. He died May 8, 1962.

Dr. Dykstra joined the AVMA in 1912, and served in numerous capacities prior to his election as president in 1931. Prior to this he had served as president of the Kansas VMA. With the death of T. H. Ferguson in 1957, he became the senior member of the group of past-presidents of the AVMA in terms of longevity since his tenure. Not content with "retirement," Dr. Dykstra remained busy with a variety of professional activities and had long been recognized as one of the leading statesmen of the veterinary profession.

Ever one to be in the forefront of the fight for professional recognition, in speaking in 1925 on "Publicity for the Veterinary Profession," Dr. Dykstra had urged:

The individual veterinarian should be heard more frequently in his own home community than is usually the case. As a class of men, we are too modest. If other professions had to their credit the list of attainments of the veterinary profession, it would be constantly dinned into our ears. The individual veterinarian can do no greater good to himself or to his profession than by careful, tactful, judicious statements, at opportune moments, about his profession. It is professionally sinful to be bold or blatant, but being too humble is also to be condemned. . . .

Veterinarians in public positions . . . must be combatively for the profession. . . . The public veterinarian can stand squarely on his feet when he defends the thought that for the best of the live stock industry it is necessary to employ the trained veterinarian for the control and prevention of animal diseases. It is absurd to admit to the slightest degree that anyone whose training is not along veterinary lines is as qualified to give veterinary service as the graduate veterinarian. . . .

The time is fast approaching when our organizations must take a more active part in obtaining desirable publicity for the profession. The profession is not lacking in attainments, but the general public knows little about them. . . . It seems to me that our national veterinary organization should look into the matter of disseminating information of a veterinary nature in the same general manner as Hygeia is doing for humans. . . Such a journal, if published, should be sent to all public libraries, high schools, live stock journals, and other fountain-heads of general and live stock information. . . . It would give the profession widespread publicity and, in the minds of laymen, place it upon the plane which it justly deserves.

However, a committee to look into the matter of a lay journal had reported at the 1926 meeting:

There are too many journals at the present time . . . It is an open question whether there is a popular demand for such a journal . . . [which] would have to enter into more or less active competition with numerous other publications already occupying more or less the same field. . . . The venture would be a very expensive one . . . [and] would have to have an individual editorial staff. . . . It is almost impossible to get veterinarians to agree on what kind of information should be supplied to the public. . . . Such a journal as is proposed would be doomed to financial failure and . . . it appears to be much better for the present at least to depend upon getting this particular kind of information to the general public through the already existing and established channels of publicity.

Needless to say this ended the matter.

VETERINARY ECONOMICS

The depression was the topic of the hour at the 1933 meeting in Chicago. President N. F. Williams observed:

There can be no virtue in attempting to conceal the fact that the veterinary profession is suffering sympathetically the pains of agriculture that languishes in the depths of despair, a victim of the unwise counsel and misdirection of political forces that are no longer manageable.

In reviewing the history of the veterinary profession, Dr. Williams noted that the practitioner has always been the foundation of the profession, and as at various times in the past, veterinary medicine could fall again:

unless the security of its foundation be zealously preserved. . . . In the present time of stress, the practitioner's most faithful and uncompromising supporters have been the ethical veterinary supply houses and the veterinary journals, which long ago pointed out the danger of temporizing with those whose methods and practices tend to undermine the profession.

In speaking on "Economic Aspects of Veterinary Medicine," J. R. Mohler asserts:

With this and other nations grappling with huge economic problems affecting millions of people, the interests of any group of workers must, of necessity, be a minor part of the entire program. . . . The value of veterinary work may seem remote to persons who are unemployed, discouraged, and hungry. . . . It is the part of wisdom for veterinarians to adapt themselves and adjust their affairs to the constantly changing order of things. . . When the value of a normal animal is low, that of a sick animal is naturally still lower. . . . Yet to cast anchor and wait for recurrence of former conditions invites stagnation.

As new areas to explore, Dr. Mohler suggested poultry practice, and centralized veterinary services — as bot control, and disinfection after outbreaks of disease.

Dr. Mohler explained that many of the activities of the BAI are based upon well-recognized economic laws. Thus the cost of eradication of foot-and-mouth disease by slaughter is "a very small fraction of what the annual loss from the same disease

would be if it were enzootic here." And the risk of introducing foreign diseases by permitting unrestricted importation of animals and their products from infected areas "outweighs the value of such importations."

Urging "It would be questionable economics as well as unsound veterinary procedure to relax any form of preparedness that has proved to be valuable," Dr. Mohler noted that at times it may be expedient to bow to the law of supply and demand. Thus in the hog cholera outbreak of 1926 the demand for serum far exceeded the supply ready for use. The Bureau, therefore, released a quantity of untested serum on the basis of reliable information:

which showed that the risk from untested serum would be much less than the probable loss from cholera if the protective serum was not made and released promptly. . . . It was a case of putting on one side of the balance the risk of distributing untested serum, and on the other side the probable toll of hog cholera that would have resulted from slavish adherence to the regular procedure.

On veterinary education, C. H. Stange observes:

The influence of training on the future interest of the veterinarian is well illustrated by the difficulties in getting some members of our profession, who were educated primarily in diseases of the horse, to interest themselves in diseases of cattle and swine. . . . The lack of interest in food hygiene in many sections is undoubtedly due very largely to the fact that the veterinarians as students received little or no instruction in this subject. . . As long as our profession is not crowded there will be no urge for young men with veterinary training to permeate into all the fields which veterinary medicine could best serve.

Not only is the profession uncrowded, but Dean Stange warns of an inevitable decrease in numbers of practitioners unless nearly 50 per cent more students graduated than in the past decade:

At the present time there are very few, if any, graduates from recognized veterinary colleges who are driving taxicabs, attending filling stations or doing any one of a number of other kinds of work not considered even in a remote way as professional. The writer doubts if any of the other professions have a better record in this respect than ours. A careful study of the alumni of two of our older and well established veterinary colleges revealed the fact that approximately 96 per cent of the graduates in veterinary medicine followed their profession. This reveals, on the whole, general satisfaction with their chosen profession.

During the depression, small animal practice suffered less than general practice, and numbers of veterinarians gravitated into this area — to an extent that the projected necessary increase in numbers graduated would have to be raised if even only normal service was to be maintained in other than small animal practice.

A feature of the meeting was the presentation of medals to Cooper Curtice and Fred L. Kilborne in recognition of their pioneer work on the role of the tick in cattle fever. In accepting his medal, Dr. Curtice acknowledges:

I am proud to have been the chosen pioneer in your wise policy of recognizing leading accomplishments of members of the veterinary profession, whose labors have been varied and far-reaching, and in so great a volume that there may be many a "forgotten man.". . . I trust that the efforts of this Association will advertise to the world how our veterinarians are benefitting the livestock industry and their part in protecting the food, health and wealth of our country.

Medals had been awarded the previous year to the four fifty-year members, and there was considerable sentiment for continuing this recognition of distinguished service.

Century of Progress

The World's Fair, featuring "A Century of Progress," was in full swing during the 1933 meeting of the AVMA, and an exhibit of the Pitman-Moore Company and Allied Laboratories, entitled: "A Century of Veterinary Progress," attracted much attention. The exhibit was turned over to the AVMA and was shown in the Hall of Science for the remainder of the season. So successful was this that a major exhibit was planned by the AVMA for the following year. This was to consist of eight dioramas,

featuring veterinary education, general practice, small animal practice, sanitary science, research work, food inspection, military medicine, and biological manufacture. These were to be designed with the idea of combatting the criticism:

The general public has no conception of the width and breadth of the field of veterinary medicine, or the scope of the activities which collectively constitute the work of the modern veterinarian.

Speaking on "Progress in the Medical Sciences," C. F. Schlotthauer observes:

As one goes deeply into the history of medicine, one is impressed with the important part that animals have played, and still do, in the transmission of certain infectious diseases to man. . . . However, the lower animals did not fail man, for as methods of animal experimentation were developed they were used in combatting many diseases. . . . Continued animal experimentation is essential for the advancement of medicine. However, it is costly. Therefore, it would appear that since man and animal have always been and still are closely associated in health and sickness, physicians and veterinarians could serve mankind better if they were more closely united. . . . Both can profit by observing the other fellow's problems, by exchange of advice and suggestions. . . . It is only by such cooperative work that progress in medicine can go on at reasonable cost and rate of speed.

In discussing "The Business Side of Our Profession," J. C. Flynn cautions:

Many efficient and capable veterinarians fail because they are not good business men, while a quack in the same town may prosper, because he makes up in business acumen that which he lacks in veterinary science. . . . The success attained in the conduct of a veterinary practice does not ncessarily depend on one's ability to collect a good fee. He must be able to read and understand the individuals with whom he deals — not only his clients but his employees.

A notable feature of the program was a comprehensive "History of Veterinary Medicine in the United States," by J. M. Arburua, who notes:

The chronicling of historical data seems to be a phase of veterinary literature that has been sadly neglected in this country. It can be said, we believe without fear of contradiction, that in no other profession can one be found that knows so little of the history and traditions of his profession as the average veterinarian.

Dr. Arburua's paper can be considered the cornerstone of the present epoch in veterinary historiography.

Papers were presented on oesophagostomiasis by R. E. Rebrassier, and wildlife parasites by J. N. Shaw; Bang's disease by R. R. Birch, and by C. P. Fitch and C. R. Donham; bovine sterility by W. L. Boyd, and endometritis by Otto Stader; swine diseases by Frank Breed, and hog cholera tissue vaccine by W. H. Boynton; canine distemper by M. L. Morris, and by A. S. Schlingman; intradermal vaccination by C. E. Salsbery; laryngotracheitis by C. A. Brandly; fowl pox by E. L. Burnett; and enterohepatitis of turkeys by L. H. Schwarte; abdominal surgery in small animals by C. W. Bower; and gas gangrene in cattle by C. J. Marshall.

The year 1933 marked the death of the last nongraduate member of the AVMA, Thomas Bland, who joined the Association in 1887, and who in 1905 had been instrumental in securing a veterinary practice act in Connecticut.

N. F. Williams

Nicholas F. Williams was born in Boston, July 27, 1872, although many of his friends considered him Texas born and bred, so closely was he associated with the livestock industry of that state. He graduated from the Kansas City Veterinary College in 1911, following which he practiced in Amarillo for 15 years. In 1926 he was appointed State Veterinarian for Texas, and was reappointed for several successive terms. For a number of years he was a member of the state examining board, and was three times president of the Texas VMA. In 1933 he joined the Jensen-Salsbery Laboratories as manager of the Philadelphia depot of the firm.

Dr. Williams joined the AVMA in 1917, and was a member of the Executive Board

prior to his election as president in 1932. He was characterized as being "gifted with a genial personality, is a fluent and forceful speaker, possesses demonstrated executive ability, and is regarded by everybody as a 'square shooter.'" He died in Philadelphia on April 8, 1937.

SMALL ANIMAL PRACTICE AND AAHA

The American Animal Hospital Association was organized at Chicago, November 9–10, 1933. The first slate of officers included M. L. Morris, president; D. A. Eastman, vice president; and A. R. Theobald, secretary-treasurer. Dr. J. V. Lacroix was director of publicity.

The first meeting was held in Cincinnati, April, 1934, with about 50 veterinarians in attendance. Featured was a five-hour session on the treatment of fractures, introduced by Dr. Robert B. Cofield, a local orthopedic surgeon. Major presentations were made by E. F. Schroeder, of the Angell Memorial Animal Hospital, and by Otto Stader, who introduced "a new feature in the employment of splints and pins for the reduction of femoral and other fractures." The subject of canine distemper was presented by M. L. Morris.

The stated objectives of AAHA were:

To improve the veterinary service and facilities for the hospitalization of small animals;

To protect and promote the professional interests of veterinarians engaged in the hospitalization of small animals;

To improve the standard of instruction for veterinary students in cynology and allied subjects;

To disseminate useful information concerning the health of animal pets among the owners of such animals;

To establish and maintain a high standard of equipment, methods and personnel in the hospitalization of small animals and supply owners of such animals with accurate information as to the availability of such facilities.

In commenting editorially on the organization, D. M. Campbell notes, concerning the dues for animal hospitals, "Sixty dollars yearly is a sizeable fee for a veterinary association and when first enthusiasm wears off, members will ask themselves

what they are getting for it." Further, some of the standards suggested for hospitals "should afford leeway to the taste of all. . . . Will minimum standards be set for animal hospital buildings, equipment and personnel?" These and other questions undoubtedly occurred to others as well. That they have in large part been answered is suggested by W. A. Aitken, who notes a growth in membership from seven hospitals and seven men in 1933 to 370 hospitals and 1,200 men in 1958, the 25th year of the founding of AAHA. Currently, Association activities include a three or four day annual meeting, and:

approximately 70% of the member hospitals and at least an equal number of nonmember hospitals are visited annually by an official representative of the association. . . The next quarter century will bring ever greater advancement.

In 1958, however, an anonymous AAHA member asked:

Has the time come to re-examine the whole situation with a view to possible re-orientation? AAHA's growth during the past 25 years has been slow - from 7 charter members to a mere 375 or so at the latest annual meeting. Although the AAHA has fulfilled much of its original purpose, it has had rough going in one of its objectives - the regular inspection of hospitals to encourage maintenance of desired standards of hospital plants, as well as the methods employed. This cannot be done when a majority of the veterinarians who hospitalize small animals are non-members . . . because the membership dues are excessively high. . . . Many practitioners are of the opinion that it would be timely to consider dividing the objectives of the founders of AAHA so that the second division could limit its activity to coping with problems relating to hospital plants, whereas the study of materials and methods would be carried out by the original organization. Such a division should result in a potential new membership of 3,000.

In 1959, Modern Veterinary Practice notes:

It is ironical that the United States, with by far the largest group of small animal practitioners in the world, is today without an association that can represent it in the new International Association of Small Animal Specialists. . . . An association open to all veterinarians with an interest in small animal practice

is urgently needed. . . . Membership in such an organization should quickly reach 7,000 to 8,000.

Such an American Small Animal Veterinary Association, it is urged, could provide for dissemination of information, legal and legislative counsel, aid in obtaining personnel and in sales of practices, public relations problems, and management counsel, in addition to other functions. There would be no intent that this organization should encroach upon the established functions of AVMA or AAHA.

Despair Over Dogs

In 1933, when allegedly a shortage of veterinarians in rural areas compounded the problem of lay vaccination, a committee of the New York City VMA investigated an alleged oversupply of veterinarians in metropolitan areas. The committee report notes that in 1922 there were about 136,000 dogs licensed in metropolitan New York, or about 2,900 for each of the 47 practitioners whose work was at least 75 per cent small animal practice. In 1931 the figures were 291,000 dogs for 126 small animal practitioners, or about 2,300 apiece, a loss of about 600 dogs per practitioner. Thus:

Your Committee feels that with the large number of veterinary students enrolled in the veterinary colleges, many who come from the cities and are planning to enter the small animal field, that a chaotic situation will be brought about unless we take remedial measures. We feel that an influx of these men who will unquestionably enter the small animal field will do a great deal of harm to the practitioners already established and that many of these new men, unable to derive a substantial livelihood from their profession, will of necessity, engage measures unbecoming to professional men. . . . We believe that there is a great deal of merit in limited enrollment, having in mind the need for the profession and the disadvantages of an oversupply to both the profession and the public.

At the same time, however, Dean C. H. Stange observes:

We have at present approximately 5340 veterinarians from 40-55 years of age, and by the

time a high school graduate who decides this year to study veterinary medicine in one of our leading colleges can be prepared and enter the profession, this large group of veterinarians, which is approximately one-half of the profession, will be 45–60 years of age. From this time on, there will be increasing numbers retiring from active service, and it is readily apparent that the 10 veterinary colleges now in existence will not be able to maintain the present profession, numerically speaking. The next 20 years, therefore, will bring with it a very heavy burden, and it is quite possible that additional veterinary colleges will be established.

It is understandable that urban practitioners would view with alarm any potentional threat to their security, and it may well be that New York City was beginning to suffer from a surfeit of small animal practitioners. It may be doubted, however, that the fullest potential for their services was being realized - and it is likely that some of these same men had earlier chided fellow practitioners for failing to appreciate the possibilities offered by dog and cat practice. Most obvious, of course, is the failure of the above-mentioned committee report to take into account the actual numbers of veterinarians in relation to their age brackets. Also, their reputed "large number of veterinary students" was actually about 1,300, an increase from the 530 enrolled in 1923, but a far cry from the 2,700 students in 1910. It may be doubted that veterinarians suffered more than any any other occupational group during the depression years, and perhaps less than most. This appears to have been especially true of small animal medicine.

In commenting in 1935 on the growth of small animal practice, the editors of *Veterinary Medicine* observe:

While rural practice is floundering to keep its head above water, the small animal branch, unhampered by outside agencies, is developing by leaps and bounds. The small animal group has enlarged its field during the same years and under the same conditions of industrial depression that the large animal group has found it difficult to carry on. While the one was erecting elegant hospitals representing a vast investment, the hospitals of the other have become unoccupied. . . . Rural practice is not a passing occupation, it is simply passing into other

hands, the sinister hands of charlatanry. . . . The present trend in veterinary medicine is to the place whence it came, and unless thoughtful minds within the profession prevail, the chances of farm animals continuing to receive the ministrations of scientific medicine are not bright. . . . For two decades the Agricultural Extension program has fostered quackery in animal medicine. The results are apparent in the decline of veterinary medicine in its field simultaneously with the growth of clinical medicine in a field it has not reached — the petanimal industry.

VETERINARY MEDICINE: AGRICULTURAL OR MEDICAL?

The inevitable lessening of practice during the depression, however, abetted in rural areas by increasing lay encroachment, led to an investigation of other areas as logical outlets for the services of veterinarians. It is of some interest to note that the journals which earlier had vociferously proclaimed that service to agriculture was the *only* legitimate objective of veterinary medicine began to question this philosophy.

Thus in 1933, Dean C. H. Stange observes that the circumstances leading to the establishment of the state veterinary colleges:

has led many to feel in the past that we were a part of agriculture, and in some cases we were regarded as an agricultural science, when, as a matter of fact, we are dealing with a medical science and should always have been recognized as a branch of those sicences. This is in no wise a criticism of agriculture; rather it should be considered a criticism of veterinary science in that we have not, to the greatest possible degree, brought medical sciences to bear upon the problems in agriculture. . . . I do not mean, as some have interpreted, that we should divorce ourselves from agriculture or decrease our interest and concern; but I am sure we can be of greater help in the solution of these problems if we develop our fundamentals of education in the field of medicine.

In 1934 Veterinary Medicine editorializes:

The veterinary profession has long been interested in public health, but its employment in this work so far has been only in special fields and somewhat disconnected. . . . Every major success that veterinary medicine has

scored in disease control and eradication has been wrought over the protest and in spite of the violent objection of the agricultural leaders. . . .

The most wide-spread disease of swine in this country is hog cholera. Our experience with it dates back 100 years. . . . Measures for the control of this disease never have been in the hands of veterinarians. . . . In Canada, hog cholera control has always been a strictly veterinary matter. . . . The cost of hog cholera to the farmers in the United States is, and has been for 15 or 20 years, \$500,000 per million animals . . . in Canada it has been \$175 per million animals. In other words, under agricultural control, hog cholera costs American farmers 3,000 times as much per animal as it costs Canadian farmers where the control of the disease is wholly in the hands of veterinarians. . . .

Veterinary medicine is a medical science, not an agricultural science. The handling of animal disease is a medical — a veterinary medical — problem. Agricultural science is outside its field when it attempts to direct it and must inevitably fail.

In "Some Thoughts on Human and Veterinary Medicine," however, L. A. Merillat in 1935 challenges the concept that the two branches have much in common:

The family physician is about as useful in the hog lot as the veterinarian in the bedroom, and as medicine advances, therapeutics becomes too eclectic for the veterinarian to look no farther into his art than the conventional practices and prescriptions of the family physician. . . . Canine medicine is one thing, equine medicine another, and human medicine is foreign to both. . . . "Good for man and beast" belongs to the era of quackery. Nutrition alone disqualifies that platitude. . . .

Except for the basic knowledge animals furnish and the etiological role they play in human medicine, the gap separating the one from the other widens rather than closes with the march of medicine. . . . The fundamental generalities of medicine are feeble concepts when one is confronted with a problematic syndrome or puzzling disease, peculiar to a certain species. . . The lesson is that veterinary medicine must develop from its own investigation. If it cannot lead or at least parallel human medicine it does not deserve a place above the rank of second fiddle. . . .

Because human and veterinary medicine are coming to a better understanding through the role played by animals in public health it has been proposed that veterinary medicine cultivate a closer study of human medicine by adopting man as the type species. . . . The reverse would be more consistent. Human medicine is more obligated to make a study of animal medicine than is veterinary medicine to study the human clinic. . . . There can be no gain in burdening the already over-crowded veterinary curriculum.

But in the same year, in asking, "Does the training of the veterinarian fit him peculiarly for protecting the health of the public in rural communities?" Ward Giltner states:

The answer is emphatically and unhesitatingly, yes. . . . If his community needs his services he cannot afford to refuse a position on the board of health, as health officer, meat or milk inspector, sanitary inspector, or any other position for which he is qualified and the duties of which do not render him less efficient in his practice. . . . If he wishes to take the position of leadership in the public health service he should take post-graduate work in a school of public health. . . . However, I do not visualize the veterinarian as the inheritor of the overwhelming control of rural public health work. He should always do those jobs for which he alone is trained and he should offer strong competition for those for which he is well qualified as are the members of other professions. . . . The veterinarian must concern himself not only with the treatment and prevention of animal diseases, but also with the protection of human health when it is menaced by those diseases. He has a duty to inform himself fully as to the relationship of the animal and the human disease and without ever encroaching upon the prerogatives of the physician, to take such steps as will prevent the spread of the disease from animal to man or advise as to the available treatment where man has contracted the disease. . . . In a narrow sense a physician is interested in human disease not human health. Certainly a veterinarian has only an academic interest in human disease but a deep and abiding interest in human health.

New Fields To Conquer

In speaking of "New Opportunities for Veterinarians" in 1933, H. H. Magens observes:

Conservation is emerging from the barbershop and poolroom stage and is about to enter a scientific stage of development. . . . The idea of scientific management of wild life is just beginning to seep into public consciousness. . . . It behooves the veterinary practi-

tioner to take advantage of this new trend of thought and to familiarize himself with these activities which not only are very interesting from a professional standpoint but may be made very helpful in establishing the value of professional veterinary service amongst sportsmen. . . .

Of recent years, our conception of the importance of infectious diseases and parasitisms as destroyers of wild life has undergone revolutionary changes. . . . Ticks last winter killed more moose in Northern Minnesota than did hunters. . . . "Alkali disease," possibly botulinus intoxication, kills more wild duck in the northwest than the migratory birds law preserves. . . . Disease is a veterinary problem and the success of the scientific management of this enormously important natural resource of our country awaits its solution.

And in 1936, H. J. LaDue, editor of the *American Fur Breeder*, in writing on "what fur breeders expect of the veterinarian," observes:

I doubt whether 10 per cent of the 9000 practising veterinarians of the United States have had any contact with the fur breeding industry or are acquainted with its history and development. . . . Here is an animal industry that merits the attention of every veterinarian. . . . Some of the most successful fur breeders in the United States are veterinarians.

Mr. LaDue mentions that the first silver fox ranch in the United States was established in 1910; in 1936 some \$50,000,000 were invested in fur ranches:

There are many unsolved problems in fur farming. The solution of these would be greatly accelerated if veterinarians throughout the country were in closer contact with our industry.

B.S.A. vs. D.V.M.

Throughout 1933 Veterinary Medicine waged unceasing war on county agents who engaged in veterinary practice. In November, 1932, the AVMA special Committee on Agricultural Extension Service had submitted a comprehensive statement of the situation to a congressional committee, detailing claims that the veterinary profession renders an essential service to agriculture; that the Federal extension service cannot render this service; that county agents sell

veterinary medicines and engage in the practice of veterinary medicine in violation of the Smith-Lever Act; that as a result "many veterinarians have abandoned their practices and have sought employment in the Bureau of Animal Industry . . . [or] in other fields of endeavor"; and that continued activity of the Federal and State extension services in the field of veterinary practice:

will result in depriving agriculture of a veterinary service which is indispensable to its existence on the present scale and on the plan now followed in this country.

Dr. D. M. Campbell notes:

The issue between the veterinary profession . . . and the agricultural extension services of numerous states is joined. The veterinary profession has stated its position officially. The outcome is not readily predictable. . . . It is the conviction of the A.V.M.A. Committee that the interference with veterinary practice on the part of the agricultural extension services, bad as it is and extensive as it has been, has only begun in comparison with what it is the settled intention of these services to accomplish. Unquestionably a drive is on to exempt county agents from the provisions of the veterinary practice act in each state of the union. This drive has already succeeded in North Carolina and Nebraska.

In testimony before the same congressional committee, D. F. Luckey, Executive Secretary of the Illinois VMA, amply documented his charge that in the guise of saving the farmer money, the extension service in his state was spreading hog cholera and making a profit on treating the disease. He cites a number of instances in which serum was sold to farmers at markups ranging from 50 per cent to as high as 871/2 per cent. These same farmers had, in effect, paid a share of the county agent's salary and the overhead of the extension service, paid for the serum purchased by the county agent - and then bought it from him at a substantial markup. To be eligible to participate in this scheme, each farmer was charged a fee of \$15.00. Dr. Luckey concludes:

The farm advisers distribute virus to incompetent vaccinators who spread hog cholera.

Then the farm adviser sells more serum and virus. This system keeps hog cholera prevalent and the hog raisers in continual danger of hog cholera so that they are pressed to pay \$15.00 a year each into the farm bureau so that they can buy serum and virus to further spread hog cholera. It is a reasonable estimate that through the farm adviser's activity, hog cholera and the added expense of vaccination is costing the hog raisers of Illinois at least \$300,000 annually more than is necessary.

Dr. Luckey, whose integrity was above reproach, further testified that one veterinarian had been coerced into joining the farm bureau (at a cost of \$15) by the threat "they would have to recommend his veterinary practice, in a certain section where they controlled, be given to another veterinarian," and that another had joined only to find the county agent a few days later teaching farmers to vaccinate their own hogs.

Not all county agents, of course, were guilty of these practices, nor does it appear that an outright invasion of veterinary practice contemplated as a formal policy by the Federal Extension Service. In fact, at the time of these hearings, C. W. Warburton, Director of Agricultural Extension, USDA, made the deposition:

County agents are not trained veterinarians. When they enter the diagnostic and treatment field of animal diseases the farmers are not getting the best service. Yet such service by publicly paid employees may cut into the practice of the professional veterinarian and make it impossible for him to live.

Dr. Campbell's urging that the extension service be "exterminated" evoked this rebuttal from K. L. Hatch of the extension service in Wisconsin:

Whatever may be the grievances between county agents and veterinarians elsewhere it is not so in Wisconsin. . . . I am sure that veterinarians no more care to see the county agent abolished than the county agents desire the destruction of veterinarians.

As proof of his contention he points out the close cooperation of Wisconsin veterinarians and county agents in testing for brucellosis. While admitting that the situation was not as bad in some states as in others, Dr. Campbell continued the battle, exposing instances of county agents engaging in veterinary practice, and running a series of provocative cartoons designed to discredit this activity.

For several years the Associated Serum Producers had been doing yeoman service in promoting the veterinary profession among hog farmers through advertisements in the leading farm papers. In "A Study in Contrasts" in 1934, *Veterinary Medicine* reprints an advertisement of the Associated Serum Producers beside a letter sent to county agents by a nonmember firm. The following excerpts speak for themselves:

You can take the risky short cut of home diagnosis and amateur vaccination - or you can profit by the experience of the most successful farmers and swine owners who have found qualified veterinary service indispensable. . . . Be safe call your veterinarian.

Today farmers universally vaccinate and treat their livestock themselves. This eliminates the cost of veterinary service. County extension agents are our dealers. . . . Should you have any condition in your livestock you do not understand, we invite you to write us.

The problems of lay treatment with potentially dangerous medications and the like, of course, have not been solved to the satisfaction of veterinarians — or the safety of the public — but the matter of encroachment upon veterinary practice by county agents and other governmental employees is nothing compared to what it used to be. In many areas, county agents are enthusiastic supporters of adequate veterinary service — by veterinarians — but this traditional antipathy has tended to obscure the situation in some cases.

1934

The program of the 1934 meeting of the AVMA was conducted jointly with sessions of the Twelfth International Veterinary Congress in New York City. Dr. J. R. Mohler was unanimously elected president of the Congress, at which delegates from 61 countries were present. A few of the distinguished scientists from foreign countries were Minett and Hobday of England,

Wall and Forssell of Sweden, Wagener and Ostertag of Germany, Leclainche, Guerin and Ramon of France, Marek and Manninger of Hungary, Gerlach of Austria, Frei of Switzerland, and Kral of Czechoslovakia. Other countries represented on the program were Italy, Rumania, Brazil, Uruguay, Denmark, The Netherlands, U.S.S.R., Tanganyika, Union of South Africa, Spain, Poland, Bulgaria, Scotland, Egypt, and the Dutch East Indies, in addition to Canada and the United States.

In his address as AVMA president, C. P. Fitch noted:

This year we are inaugurating an entirely new method of legislative procedure. The House of Representatives meets officially for the first time. . . . The functioning of this organization will be directly influenced by those whom it seeks to aid. It can no longer be justly said that a few dominant personalities . . . dictate the policies of this organization.

At the first session of the House, amendments were initiated to provide for a president-elect (approved in 1935) and for election by mail ballot upon nominations by the House (disapproved); a proposal to add a Committee on Public Relations was later approved, one to admit nonveterinarians as active members was not approved.

Papers presented at the joint meeting by American workers included those on encephalomyelitis by R. A. Kelser; mastitis by F. S. Jones and R. B. Little; psittacosis by K. F. Meyer; coryza by J. R. Beach; hog cholera by Marion Dorset; sterility by W. L. Boyd; parasitology by M. C. Hall, and by T. W. M. Cameron; abortion by W. E. Cotton; foot-and-mouth disease by Jacob Traum; paratyphoid infections by Charles Murray; deficiency diseases by G. H. Hart; pullorum disease by H. Van Roekel; leukemia by E. L. Stubbs, and lymphomatosis by F. D. Patterson; diseases of young animals by W. L. Williams; and the relationship of veterinary science to animal breeding and public health by J. R. Mohler.

A post-congress clinic was held at Columbia University with demonstrations of epidural anesthesia by E. J. Frick; ocular enucleation by H. C. Stephenson and H.

J. Milks; circulatory pharmacodynamics by H. H. Dukes and Jesse Sampson; hernia reduction by W. M. Mitchell of Edinburgh; intestinal anastomosis by W. F. Guard; cesarean section by E. K. Sales; blood examination by R. E. Nichols; cecotomy by D. A. Eastman; and fracture pinning by A. R. Anderson.

Dean C. H. Stange warned of an inevitable decrease in numbers of practitioners — and practice — unless graduating classes were increased by at least 50 per cent: "As long as our profession is not crowded there will be no urge for young men with veterinary training to permeate into all the fields which veterinary medicine could best serve." Also, the schools would have to place more emphasis on training in these areas; many displaced equine practitioners had shifted to small animal medicine rather than cattle or swine practice, and there was little interest in food hygiene.

Dr. Fitch recommended several changes in policy for the *Journal*, in particular, "papers . . . which are of limited interest or which are unduly lengthy, either be omitted . . . or materially reduced"; and a section of abstracts added:

particularly for practitioners of veterinary medicine. . . . It is not always easy for a person trained in the research field to evaluate properly some scientific papers published in our *Journal* and other scientific publications.

C. P. Fitch

Clifford P. Fitch was born in Oneida County, New York, July 1, 1884, and graduated with honors in mathematics and biology from Hamilton College in 1906, following which he taught high school. In 1911 he received the D.V.M. with honors from Cornell, remaining on the staff until 1917, when he became chief of the Division of Veterinary Medicine at the University of Minnesota. In 1921 Iowa State College conferred upon him the degree of Doctor of Science.

Dr. Fitch joined the AVMA in 1912 and served on the Committee on Bang's Disease from 1919 to 1930, when he was elected to the Executive Board. In 1933 he

was elected president of the Association. A long-time secretary of the Minnesota VMA and the State Live Stock Sanitary Board, he played a major role in formulating policies for animal disease control in Minnesota. Among other honors, he was a fellow of the American Association for the Advancement of Science, and a member of Sigma Xi and Phi Beta Kappa. Dr. Fitch died on January 12, 1940.

1935

At the 1935 meeting in Oklahoma City, President R. S. MacKellar urged, "Membership in the American Veterinary Medical Association should be dependent upon membership in and the approval of a local or state association." And regarding the problems of redistribution of veterinarians occasioned by the depression:

The necessity has arisen for reciprocity between certain states, whereby veterinarians in stricken areas can be assisted in reestablishing themselves in other states. . . . In this connection . . . there is no record of a single case of a veterinarian being on public relief.

On the need for better public relations, Dr. MacKellar states:

There remains yet to be taken a concrete step to bring to the effective attention of the profession and the people the whole question of "veterinary consciousness." To make America "veterinary minded" . . . this Association should create a Committee on Public Relations. . . . As long as we defer in getting our story properly before the people, and the drama of our profession in current events, that much longer shall we continue to shroud our careers in ambiguity in the public mind and narrow our national scope.

Speaking on "The Veterinary Service of the United States," L. A. Merillat charges incompetency:

because it is operated without plan or unified direction. . . . Veterinary quackery of 1935 is more deadly than it was in the nineteenth century. . . . The self-made, state-made quacks of this period have had a dangerous arsenal thrust into their hands by public sanction. . . . When the veterinary quackery now growing so strong in the United States drags the veterinary service down to its level as it is certain of

doing, even the spectacular plagues of known history can return to complete the job of the smouldering panzootics of this hour. Diseases of animals that once destroyed great nations can destroy great nations now. . . .

What is the remedy? . . . when the American Veterinary Medical Association has formulated a plan for erecting a faultless veterinary service for the American people and all groups use their influence to put the plan into operation, the troubles of the veterinary profession will begin to lessen. . . The veterinary profession of the United States is confronted with conditions that must first be understood before organized veterinary medicine can fulfill its obligations to its members and to society.

Secretary Hoskins reported that 47 state associations (Idaho and the District of Columbia did not have associations) had affiliated with the AVMA, and the Ontario Association had taken favorable, but not final, action.

Grading of the veterinary schools was urged by Dr. MacKellar, to comply with an Army ruling that candidates for reserve commissions must have graduated from a Class A school. Col. R. J. Foster, however, reported that the stipulation had been changed to "a recognized school," thus taking considerable pressure off both the AVMA and the schools.

In an early report on artificial insemination in cattle, H. E. Kingman, Sr., stated he had been practicing this technic for some time at the Wyoming Hereford Ranch, "but the results are far from satisfactory." Cassius Way, working with dairy herds, reported 40–50 per cent success. E. R. Frank noted that a student at Kansas State had artificially inseminated a dog.

Among the papers presented were those on brucellosis control by A. E. Wight; swine erysipelas by T. W. Munce; periodic ophthalmia by Alexander Zeissig; demodectic mange by M. L. Morris; hydrocephalus in dogs by C. F. Schlotthauer; and dextrose therapy by Otto Stader.

Papers on poultry subjects included fowl leukemia by M. W. Emmel, and fowl paralysis by R. Fenstermacher; swine erysipelas in turkeys by F. R. Beaudette and C. B. Hudson; treatment of caged birds by

Cliff Carpenter; and viral diseases by C. A. Brandly.

R. S. MacKellar, Sr.

Robert Stuart MacKellar, Sr., was born in Edinburgh, Scotland, July 12, 1875, and came to this country while very young. In 1894 he graduated from the New York College of Veterinary Surgeons and began practice in New York City. Except for two years at Nyack, New York, he has continued in this practice for more than 60 years, the last 30 plus in association with his son, R. S. MacKellar, Jr., (Cornell, 1928).

Dr. MacKellar joined the AVMA in 1910, was elected to the Executive Board in 1927, and was Board Chairman (1931–1934) prior to his election as president of the Association in 1934. Since then he has maintained an active identification with AVMA affairs. He was secretary of the New York City VMA for nine years, and was three times its president. He also served as vice president and president of the New York State Veterinary Medical Society.

RETROSPECT AND PROSPECT

In 1932 Fritz Volkmar had called attention to:

the anomaly that veterinary history is not taught at any of the American veterinary colleges; presumably from the mistaken notion that the veterinary profession in this country has no past. While it is true that veterinary history here is still in the making, nevertheless, the veterinary profession of North America has a glorious past of which it justly may be proud. At the present time, when the sentiment is for lengthening the veterinary curriculum to provide for broader cultural training of veterinary students, the inclusion of a lecture course on veterinary history may well be given serious thought by those in charge of veterinary education.

And in an editorial on "A Far-reaching Omission in Veterinary Training," L. A. Merillat in 1935 charges:

It is customary and orthodox to complain that the veterinary profession is not understood and not appreciated. Unfortunately this is true, but not more so by the public than by veterinarians themselves. On that account, treating the ills complained of is apt to lack logic. . . . The veterinary profession of the United States is building alongside, not upon, the right foundation and continues to do so because too few of its personnel have ever qualified in the history of what it represents. No one on the outside can be expected to know more about our enterprise than we ourselves know about it.

The medical profession has been placing its case intelligently before the people since time out of mind. How it dotes on Hippocrates, Galen, [et al.] . . . to emphasize how unfortunate mankind would be but for the blessings these men have brought! The same program is employed for veterinary medicine in all of the important countries except for the United States. Here we reap as we have sown. . . . Our work lacks the background that only a better knowledge of veterinary history can consecrate.

Broadcasting about scientific discoveries and stamping out foreign plagues is helpful propaganda, but what good can that accomplish if the public does not know to whom it is obligated for the achievement? Remaining entirely ignorant of the principles that compel nations to maintain a veterinary service of the highest possible order, that they may not perish from loose attention to a fundamental resource, is a gap to fill. . . . Repairing a house can be done better if one knows its make-up.

The years 1933–1935, however, are notable for the number of contributions to the history of American veterinary medicine. Dr. Arburua's initial effort in 1933 is noted elsewhere as the cornerstone of this period of historical endeavor. In 1933 A. T. Kinsley presented "A Century of Hog Cholera," also noted elsewhere, and in 1934 J. P. Foster, "Some Historical Notes on Contagious Pleuro-pneumonia." In 1934 William Moore, L. J. Faulhaber, and J. H. Brown published a 54-page Veterinary History of North Carolina, and in 1935 a 225-page History of the School of Veterinary Medicine of the University of Pennsylvania, 1884-1934 was published on the occasion of its fiftieth anniversary. And in 1935 L. A. Merillat and D. M. Campbell's monumental two-volume Veterinary Military History appeared. This was characterized by Dr. Arburua as:

the outstanding veterinary contribution of the decade. . . . This new work fills a gap in American veterinary literature which, until now, has been incomplete. . . . As true historians, they have attempted to present bold, ungarnished facts, with a minimum of bias, and it may truthfully be said that they have succeeded, although facts frequently were embarrassing. . . . The title is misleading. Although the work covers the military aspect the more completely, nevertheless it gives us, by far, the best available work on the civil veterinary history of our country. . . . It is hard to conceive of anyone in or out of the profession who would not benefit by its reading.

In 1935 J. R. Mohler presented a paper on "Fifty Fruitful Years in Veterinary Science," in which he lists as the principal fruits of veterinary endeavors:

1. A successful conquest over fear. 2. Contributions to public health. 3. Improved economic stability. 4. Humane treatment of animals. 5. Industrial development. 6. A better international understanding looking toward world peace.

Dr. Merillat however, summarizes the current status of "The Veterinary Service of the United States," amplifying his contentions with historic fact:

Nowhere is there any evidence in American history that a veterinary profession of the orthodox sort was wanted, except by the practitioners. . . . When the American Veterinary Medical Association has formulated a plan for erecting a faultless veterinary service for the American people and all groups use their influence to put the plan into operation, the troubles of the veterinary profession will begin to lessen.

Dr. Volkmar's desire to see history taught in the veterinary colleges did not materialize, and in 1935 H. P. Hoskins editorializes:

A student can complete his course at almost any veterinary college without learning very much about the history of his profession, or even the names of more than half a dozen veterinarians prominently identified with the profession. This is not true of medicine. Nor is it true of law. Why should it be true of veterinary medicine?

Concerning "The Value of History," Dr. Merillat observes:

If what has gone before in one's occupation does not amount to much, neither does the diagnosis of disease amount to anything in its treatment. . . . It is plain stupidity for the veterinary profession to trek and stumble along handicapped by public ignorance of its contributions to human welfare as it has done so long in this country because even the leaders are indifferent to: (1) The extent to which veterinarians have made the world a safer place in which to live; (2) the extent to which they have amplified man's food, clothing and pleasure; (3) the extent human diseases have been curtailed through their achievements; (4) to what extent the industries have been promoted under their watchful direction; (5) to what extent human and animal suffering has been attenuated by their scientific discoveries and the utilization of them; (6) to what extent human welfare rests upon their daily work; and (7) to what extent man's present setup was made possible through the progress veterinary medicine has been able to make in spite of a general misunderstanding of its objectives and obligations inside and outside of the profession.

Anyone who has read this far might well consider his interest as silent testimony to the fact that the urgings of these men nearly a generation ago have borne fruit. Certainly the several enthusiasts who have sparked the recent resurgence of interest in history would not claim to have invented the subject. And while there is some merit in editors and publishers printing what should be least be a matter of record, the fact is that veterinarians are reading more history than ever before, and students are having an increasing opportunity to study the subject.

1936

In his presidential address at the 1936 meeting in Columbus, Ohio, J. C. Flynn urges:

If we are to serve the country well, we can do so only by keeping our colleges abreast with the progress of medicine. . . . When the American Medical Association was organized in May, 1847, medical education in the United States was a farce . . . comparable to that of veterinary medicine, when this Association was formed in 1863. . . However, during the last decade of the 19th century, great progress was made in the educational systems of both professions. . . . Today . . . graduates come out of the colleges well trained in medicine and surgery, but with very little conception of how to

associate their training with the many problems they meet in their chosen field. . . . I believe no student should be given a diploma to practice until he has had at least one year with a

good practitioner. . . .

Food inspection is one of the undeveloped fields of American veterinary medicine . . . A gigantic system of food inspection would not be costly, and it would pay good dividends to agriculture in consumer confidence and the people in terms of better health. Expanding the veterinary service to that extent would, however, require a larger personnel than we have now. . . The number required is limited only by the amount of service the profession is resourceful enough to develop.

News items in the Columbus papers at the time of the meeting mention:

The mere fact that this is its seventy-third yearly meeting shows that it has had a long line of progress and an important place in the professions that have to do with the curative and preventive arts. . . . These two groups [human and veterinary medicine] have much in common in the fight to prevent the spread of disease, whether it be in our food supplies or in our bodies.

However, in speaking on "The Bridge of Goodwill," Samuel R. Guard, editor of *Breeder's Gazette* fires a salvo point blank at the veterinary profession:

The charlatan, the deceiver, the herb-doctor, the cheater is in your midst . . . another Augean stable that needs a modern Hercules. . . . Animal Husbandry, no less than human kind, has to deal with quacks, fakers, and "medicine men" who would fatten on the diseases that terrorize us.

Thus he notes that Dr. Roberts'

Uterine Capsule for slow breeding cows consists of sodium bicarbonate, sucrose, starch, cereal tissues and some dried yeast . . . [and] I learn that my old friend Frank B. Graham, will teach me, i.e., he will teach anyone "who can read his own writing and has fair hearing," how to treat barren cows and by inference how to conquer Bang's disease. . . . In fact, he offers the hope to any owner of aborters that his students will buy such cattle, and he infers that his method will cure them. . . Anyone who condones such a practice is a menace to the animal industry. . . . I am dismayed to contemplate the horror and destruction that follow in the wake of this nefarious business.

Those who are not aware of the methods employed by Graham to discredit the veterinary profession will be interested in Mr. Guard's description:

When he holds a school, Mr. Graham surrounds it with the mummery that you would expect after reading his advertisements and his catalog. He makes every student raise his right hand and swear that he is not a veterinarian. Because the vets are trying to close him up! He instructs the boys not to take any notes,

because they can't keep up!

"Does everyone here understand that he is not to tell what he heard or saw?" the president of the "Graham Scientific Breeding School" inquires pertinently as he collects the 50 bucks. Then the next day he asks all the boys to stand up who will agree to take this oath: "On the honor of a gentleman, I promise not to teach anyone what I have learned in this school." It is not exactly the oath of Hippocrates, but it serves the purpose. Then he asks you to look around and see that everyone is standing. So he concludes with this benediction: "If you believe in these men you saw standing and in Almighty God you cannot betray. Neither can you betray ten thousand other breeders who have taken this course."

Guard continues:

I want to build a new bridge of goodwill between the veterinary profession and the live stock industry. . . . I could read you letters which you ought to consider with care. They would show you what's wrong with your profession. They would tell you of veterinarians who presume to cure barren cows. Of veterinarians who charge unconscionable fees. Of tightlipped, narrow-minded veterinarians who maintain the supercilious high and mighty attitude of not telling the farmer anything for fear he will do his own veterinary work, not even the simplest principles of sanitation or animal hygiene for fear the live stock won't get sick and make a fat fee for the local veterinarian. . . .

Can we get together? . . . These enrollments in the Graham School, and these uterine capsule sales, and the vivid correspondence from the field defending Mr. Graham's purpose and methods, all indicate what? They indicate a yearning hunger for something that we have not supplied. They show a demand that is very insistent. Let us supply it. . . . I myself, as a live stock editor, have suggested and I reiterate it now, that every important live stock county in America should have a live stock agent, who should be a trained veterinarian as well as an animal husbandman. . . . In my layman belief your code of ethics is not a veterinary code, it

is a medical code, copied from the M.D.'s. You should sell your work to the public. You should build the bridge of goodwill between the veterinary profession and the livestock industry. An American Veterinary Institute — as a free will information service to your brother stockmen — would do it.

Concerning "The General Practitioner," past-president T. A. Sigler notes:

It was through the services of the general practitioner rendered to our beasts of burden, the horse and the ox, that veterinary science had its birth. . . . Has the general practitioner been somewhat forgotten in the advance of the profession? . . . Has the practitioner neglected his opportunities for pushing the profession forward? The small-animal practitioners. . . . have pushed their business, increased their facilities, modernized their hospitals, until they are quite as efficient as those who handle our human patients. . . . It is up to us in general practice to improve our methods in every way we can and try to make capital out of handicap, by seeing to it that every sanitary measure and precaution is taken... Asepsis and anesthetics... have robbed the handling of large animals of some of its hazards. . . . We must not fall into the rut of slipshod fashion of merely getting by and trusting to luck.

After a spirited discussion, a proposal to grade the veterinary colleges as Class A, B, or C failed of adoption. However, a report of the Committee on Education outlining criteria for a Class A school was adopted for consideration "in connection with any future classification." This called for "suitable facilities," a staff of 17 veterinarians for a school with 200 students, one preveterinary year, and a four-year curriculum with specified minimum times devoted to each of 12 subject areas. In retrospect on the subject, L. A. Merillat noted that the AVMA:

has often hesitated but never erred in the making of final decisions. . . . So, at the present time, when the schools . . . are restricting entrants to comply with the limited accomodations and facilities that state legislatures are supplying, the time is not opportune for placing the struggling schools in an embarrassing position.

Papers were presented on hip injuries in small animals by E. R. Schroeder; crystal violet vaccine by C. N. McBryde, indigestion in dogs by L. W. Goss, ketosis by L. M. Roderick, infectious bronchitis by F. R. Beaudette, mastitis by C. H. Case, prostatic disease in dogs by C. F. Schlotthauer, sheep diseases by F. E. Hull and W. W. Dimock, virus studies by C. A. Brandly, brucella antigen by I. F. Huddleson, enterohepatitis by A. J. Durant, trichomoniasis and anaplasmosis by Hubert Schmidt, and streptococcic infections in dogs by H. J. Stafseth.

With the death of George H. Berns at the age of 89, the list of Honor Roll members was reduced to three, of which C. W. Crowley and Benjamin McInnes became the first sixty-year members. Dr. McInnes died the following year at the age of 85. The son of a farrier, he had been educated at Edinburgh (M.R.C.V.S., 1874), and soon after his return to South Carolina he was appointed State Veterinarian.

In accordance with a new provision for election of the president a year in advance, O. V. Brumley was made the first president-elect of the Association.

Service and Status

In editorializing on the status of the profession in 1936, L. A. Merillat notes:

It is amazing how many thoughtful men are becoming wary over the destiny of the veterinary profession. . . . A critical survey of the present situation shows that but a small percentage of the service ordinarily delegated to graduates of veterinary colleges has ever been developed and much of that which has been . . . is falling into outside hands. . . . To argue that there is a sufficient number of graduates in the United States is not to know how little of the total veterinary service is done by the college-trained group, not to understand how much of it remains to be developed, and not to realize how fast the clinical, investigational, educational and administrative functions are passing out of the hands and councils of the personnel constituting the veterinary profes-

Judging from the sound doctrines which organized veterinary medicine in this country has always defended and the progress it has made during the short 73 years of its life, it is inconceivable that it would not mobilize its influence for the public good when an issue as important as the one now perturbing the majority of its membership has crystallized.

In a radio address on "What Veterinarians Are Doing Today," President Flynn states:

It is the intention of the members of the American Veterinary Medical Association to put forth our best efforts to bring about better health regulations throughout the United States and to bring the standard of health in the small towns and rural districts up to that of the large cities. . . Another thing that we plan to do is to try and eliminate from the racetracks of this country the unscrupulous individuals who dope race horses, thereby putting into disrepute one of the great American sports, to say nothing of the inhumane treatment given our good and noble friend, the horse.

Dr. Flynn closes with the suggestion, "If the public will go to the trouble to investigate, they will be surprised at the accomplishments of the veterinary profession," and gives in a general manner several of the major achievements in recent times. It might be questioned, however, just how much of the public would take the trouble to look up the details.

In an address in 1936 on "Planning for the Future in Veterinary Medicine," W. A. Hagan observes:

We have awakened to a consciousness that a straight course cannot be steered unless we have a chart to go by. . . . The profession should take a broader view of its work than has been done in the past. Every member should be made to realize that his function is more than doctoring the ills of live stock. He should be an adviser to the public on animal health. . . . [Although] I am for anything that will bring us in closer alliance with medicine, and for anything that will aid in dispelling the notion that veterinary medicine is just a specialized branch of agriculture . . . we should not forget practical considerations which tell us that our natural friends are the live stock men. . . . A professional group numbering no more than ten or eleven thousand members cannot hope to get far . . . unless it has the friendly support of larger, more influential

I believe that the profession has progressed further in the estimation of the public than many of us have realized. . . . The future progress of veterinary medicine in this country, and the improvement of the status of the profession in the public eye, are dependent upon our own efforts to improve the service that we are rendering. . . . A full realization that the

trend of all medical thought today is toward prevention rather than cure, and that the initiation of programs of lay education leading in this direction is desirable, should be inculcated into the profession.

State Service

An experiment to provide low cost veterinary service to be conducted by the Resettlement Administration and the Extension Service of Michigan State University was announced in 1936. This plan called for an organization which would provide for a contract veterinarian to make one visit per month to the farm of each member. He would render all necessary veterinary services, including docking, dehorning, vaccinating, castrating, etc., and give advice on feeding, sanitation, and the like, for a membership fee of \$5.00 and an annual charge of 80 cents per animal unit – a unit consisting of 1 horse, 1 cow, 2 young cattle, 5 hogs, 7 sheep, or 100 poultry. Thus a farmer with 1 horse, 4 cows, 2 heifers, 2 sows, and 100 chickens would pay (to the association) just over \$11, in monthly installments. In addition, he would be entitled to two emergency calls per year, a charge being made for additional calls. The veterinarian would be on salary (not stated), would spend six days a month, drive 275 miles, and supply all equipment and drugs, except biologicals and expensive pharmaceuticals, which would be supplied him at cost. The Journal editorializes:

Although the proposed plan has many of the earmarks of group medicine . . . one decided advantage of the plan is to be found in the fact that the veterinarian will be called upon to render services which ordinarily are not performed by the veterinarian. . . A tremendous advantage . . . provides for the veterinarian acting as an advisor in animal husbandry problems. . . . There will be no problem of unpaid veterinary bills . . . [and] the periodic visits of the veterinarian to each farm should prove valuable in preventing the development of disease. . . . The experiment will be watched with considerable interest.

There is no evidence, however, that the proposed experiment ever materialized.

J. C. Flynn

J. C. Flynn was born at York, Nebraska, in 1878 and graduated from the Kansas City Veterinary College in 1910. He established one of the first exclusively small animal hospitals in the country, and for many years was the leading exponent of small animal practice, travelling many thousands of miles urging others to enter this specialty and giving demonstrations of his technics. Dr. J. V. Lacroix credits Dr. Flynn with having had more influence on the development of small animal practice during the 1920's than all other factors combined.

Dr. Flynn also wrote on small animal topics and was an associate editor of North American Veterinarian for a time. He was elected AVMA president in 1935 and was instrumental in bringing in about 500 new members. Later he helped organize the American Society of Veterinary Therapy which attracted a sizeable membership for several years. He retired from practice in 1940, but became active again during the war. He died on April 26, 1954, in Kansas City, where he had spent most of his professional life.

1937

Public relations was a dominant theme at the Omaha meeting in 1937. In his presidential address, Colonel R. J. Foster noted:

The veterinary profession's activities in public life are often-times found to be subordinated, not only to its detriment but to that of the work to be accomplished. Public officials and organizations — national, state, and municipal — are prone to utilize the services of veterinarians under descriptive headings, thereby entirely obliterating their professional standing. . . . We should use every means at our disposal to keep our professional identity known . . . by insisting on proper titles identifying the professional services rendered.

Regarding a growing menace to public health, Colonel Foster urges:

The control and eradication of rabies in animals is certainly a veterinary problem in which all other agencies should cooperate. . . .

I know of no other animal disease that is transmitted to humans where the disease is subject to control and eradication by other professions or organizations than the veterinary profession. Why should an exception be made to rabies?

And on food inspection:

There is still one very serious defect that is most deplorable from the standpoint of protection to human health. There is very little or no inspection or supervision over locally or farm-killed meats. . . . [And] you cannot have efficient milk inspection in this country unless milk production is under the sanitary supervision of the veterinary profession. . . . I believe that what this country needs is another Upton Sinclair "Jungle" novel setting forth conditions of our meat and milk supply that are not under professional supervision.

Speaking on "Greater Achievement Through Closer Cooperation," J. R. Mohler observes:

with public approval and support, the prestige of the veterinary profession of this country has grown. . . . This work has become a dominant influence in agriculture, industry, and human welfare throughout the United States. . . . Good business methods have prevailed. Through sound organization the cost of veterinary service is small in proportion to the benefits derived. . . . Cooperation within our profession has not only fostered progress, but has done so with economy and businesslike efficiency. . . .

Intellectual pioneers have rarely had an easy time. . . . Until rather recently a few individuals, or at least a small minority, have led the majority in scientific thinking and action. In the veterinary profession today we are fortunate in finding a much more advanced situation in this respect. The great majority of veterinarians are conspicuously open-minded and progressive. . . . In tuberculosis eradication the support of a large majority has carried this vast campaign to assured success. Yet there have been noticeable examples of doubt, indifference, and even opposition by persons whose hearty cooperation would have been extremely valuable. . . .

In veterinary field work, the type of cooperation that I deem especially desirable has these qualities:

It is intelligent, recognizing the professional soundness of the project.

It is public spirited, subordinating self-interest to the common good.

It is courageous, signifying a willingness to carry on even against odds.

It is optimistic, having full confidence in ultimate success.

Secretary Hoskins reported on the publication of a new directory: in the five years since the previous one over 900 new members had been added, another 500 reinstated, and about 1,000 dropped for nonpayment of dues, the net membership being in excess of 4,600, the largest in history. One new name was added to the Honor Roll, that of past-president Tait Butler.

In the decade or so since the private schools had closed, total enrollment (in the state schools) was sharply curtailed—although this undoubtedly was due in part to the depression. An inevitable concomitant of the closing of the private schools was disclosed by the rising death rate of members, increasing from 8.47 per thousand in 1930 to 13.61 in 1936.

The Journal circulation was in excess of 5,000 copies, the highest in history. The Executive Board recommended a revamping and enlargement of the Journal, with the establishment of topical departments. This was adopted and put into effect the following year. As put by President Foster:

At every meeting that I have attended during the year, the members have almost unanimously favored revamping the *Journal* and putting a little "it" or personality into the thing.

The "new" Journal made its appearance in 1938, with perhaps the most significant change being the addition of a group of associate editors of specialties. These included: J. R. Beach, Poultry Diseases; E. A. Benbrook, Parasitology; J. B. Bryant, Swine Practice; C. H. Case, Cattle Practice; James Farquharson, Large Animal Medicine; C. P. Fitch, Research; Ward Giltner, Public Health; W. F. Guard, Surgery and Obstetrics; R. A. Kelser, Military Medicine; J. A. S. Millar, Small Animal Practice; J. R. Mohler, Sanitary Science; C. R. Schroeder, Zoo Practice; and J. E. Shillinger, Diseases of Wildlife. Editor Hoskins, however, noted one lamentable fact: "Less than 2 per cent of the entire membership ever contribute anything to the Journal."

What might be thought of as a temporary "hall of fame" consisting of active veterinarians is the list of nominations for representation at the 13th International Veterinary Congress. As submitted by Adolph Eichhorn, these included (one in each of ten sections): G. B. Schnelle, Internal Medicine and Surgery; J. R. Mohler, Infectious Diseases; T. H. Ferguson, Cattle Diseases; M. C. Hall, Parasitology; R. A. Kelser, Tropical Diseases; E. L. Stubbs, Poultry Diseases; G. H. Hart, Zootechnics; Ward Giltner, Food Hygiene; R. J. Foster, Military Organization; and A. F. Schalk, Veterinary Physiology.

Recipient of the first 12th International Congress Prize was Denny H. Udall, for his achievements in "the development of knowledge basis to pathology and methods of control of bovine mastitis." An innovation in AVMA history was the election of the first woman to an Association office—that of Dr. Helen Richt Irwin as secretary of the Section on Small Animals.

Papers were presented on nutrition by G. H. Hart, endocrinology by W. G. Venzke, hernia by E. R. Frank, urolithiasis by I. E. Newsom, and actinomycosis by James Farquharson. On poultry: diagnosis by S. H. McNutt, leukosis by C. D. Lee and by E. L. Stubbs, and laryngotracheitis by F. R. Beaudette. On research: brucellosis by C. M. Haring and by C. P. Fitch, oat hay poisoning by Frank Thorp, Jr., and moldy corn poisoning by L. H. Schwarte. And on small animals: neurology by C. F. Schlotthauer, dermatology by S. W. Haigler, blood transfusion by C. W. Bower, and cat diseases by F. F. Parker.

In commenting upon the Omaha meeting, *Veterinary Medicine* notes some of the changes wrought since the previous meeting there in 1898. Then, of a total membership of 246, only 114 were members in good standing. Dr. A. T. Peters was the only officer, and Tait Butler, J. P. Turner, W. L. Williams, and W. B. Niles, committee members, were the only surviving members of the official family in 1898. Of the 14 men who presented papers at the

1898 meeting, only L. A. Merillat, J. W. Connaway, and Charles Ellis had survived, along with two other members of the 43 in attendance (total attendance: 134), G. A. Johnson and W. H. Kelley. Of 24 honorary members in 1898, only one, Sir John M'Fadyean, was living in 1937.

Concerning the general tone of more recent meetings, it is charged:

one notes no improvement in the quality of the papers presented. . . . Leaders in the profession write no better English nor present no higher class scientific papers now than Salmon, Pearson, Stewart, Nelson, Law, Merillat and others wrote in that earlier day, nor is there much difference in the subjects discussed. Rabies, hog cholera and tuberculosis were engaging attention then as now. . . Filtrable viruses were discussed in the president's address, as was also shipping fever . . . the need for collecting statistics on the loss from animal disease . . . [and] the need for informing the public concerning veterinary service.

A Matter of Policy

In their report, the recently established Committee on Policy, consisting of L. A. Merillat, Cassius Way, M. Jacob, R. J. Foster, and H. P. Hoskins, note:

A favorable change toward the importance of veterinary medicine is taking place. In all parts of the world veterinarians are succeeding in drawing public attention to the obstacles diseases of animals lay in the path of mankind. . . . [However] incalculable harm has been done to the veterinary profession by avoiding the use of the words "veterinary" or "veterinarian" in so many of the important public services which are purely veterinarymedical in character. The result has been that the masses are little aware that a veterinarian actually exists in this country. . . . The surveys of this Committee appear to show that the American public, once aware of the purposes of veterinary medicine, will insist upon its fullest utilization.

Reporting for the Committee on Public Relations, D. M. Campbell notes its adoption of two specific directives of the Committee on Policy:

1. Our veterinary service shall be operated with the public welfare uppermost in mind. 2. Human and animal welfare are inseparable and publicity for the veterinary profession must be written around that indisputable fact.

Particular attention was called to the campaign of the Associated Serum Producers to focus the attention of livestock owners on livestock health and to acquaint them with the values of veterinary service.

Speaking as president of the Association later in 1937, O. V. Brumley presented a comprehensive program for "the expansion and improvement of public health education for the future." This included revision of the veterinary curriculum to provide adequate public health orientation, development of a curriculum leading to the degree of Doctor of Public Health. surveys of public health situations by veterinarians in their local communities, an educational program initiated by the AVMA, closer cooperation with the medical and dental professions, a wildlife research program in relation to the zoonoses, and efforts by the veterinary profession to have proper recognition and a part in the federal public health program. In concluding, he states:

The work of public health is so broad and inclusive that no one profession can master all the problems. The veterinary profession has a very definite place in the program and we should recognize that other professions and agencies have theirs also. Consequently, we should accept our part of the responsibility for the promotion of a public health program and cooperate fully with all others interested in the same thing for better health and a happier citizenship for the entire country.

At the same time, A. F. Schalk recognizes public health as the least developed aspect of veterinary medicine, but, noting the salaries of \$1,200 to \$1,500 frequently offered for full-time positions in this area:

To express it but mildly, the outlook and prospect is exceedingly dark and discouraging in view of existing conditions. The student can ill prepare himself specifically for such indefinite work and the college officials and instructional forces will hesitate to catalog additional special courses in a field of work that now appears so speculative and holds out so little in encouragement for the future.

The Stader Splint

A major advance in fracture treatment, and one which found ready application in

human surgery, was developed by Otto Stader, of Ardmore, Pennsylvania, and demonstrated by him early in 1937. This technic, utilizing the Stader reduction splint, rapidly supplanted the more commonly used technics for several types of fractures, and within a year had been applied in about 300 cases by some 40 veterinarians. During this time Dr. Stader also served as consultant in application to the splint in ten human cases.

As noted by Dr. Stader, a number of the technics used until the twentieth century were not unlike those described by Hippocrates, and until the 1920's, the most common technic was that of splinting with wood or metal strips in conjunction with bandaging impregnated with plaster or some other hardening agent: "Many a practitioner has lost his temper when such a cast had to be applied to a femoral fracture on a male dog." The Thomas traction splint obviated some of these problems, but created others, especially with regard to the regaining of normal joint function. As stated by Dr. Stader:

Our patients are difficult to restrain; are destructive to many of the splints applied; and in many cases are unable to indicate to us when the splints that we have applied are causing pain and discomfort. It is often difficult to apply effective splints to the dog's extremities because of their anatomical structure. We see too often the fouling of the splint by the body excretion. Last, but not least, we are unable in many cases to effectively secure countertraction which is necessary in order to maintain length and alignment of the fragments. To overcome effectively these problems and at the same time afford greater comfort, unrestricted circulation, and free articular functions, new methods different in principle and a new type splint of special design seemed necessary.

R. J. Foster

Robert Julian Foster was born in Ohio, September 7, 1880, and grew up in Ithaca, New York, where he obtained his D.V.M. at Cornell in 1902. After teaching at Clemson College, the University of Missouri, and Kansas State, he served with the United States Cavalry until 1916 when he was appointed First Lieutenant in the Veterinary Corps. As a Major in 1918 he or-

ganized and commanded the Veterinary Section of the Medical Officers' Training Camp at Fort Riley, and as a member of the Surgeon General's staff he directed the reorganization which placed the Veterinary Corps on its present basis. In 1920–1922 he was Chief Veterinarian, Army of Occupation, at Coblenz, Germany.

Upon his return to the states, he received special commendation for his instruction in the School of Horsemanship at Fort Riley, and served as Department Veterinarian, Canal Zone, from 1926 to 1929. Upon his recommendation, a meat inspection service was established for the Civilian Conservation Corps, the more than 100 veterinarians so employed bringing the Veterinary Corps to its greatest strength since 1920.

Colonel Foster joined the AVMA in 1906 and represented military veterinarians several times since 1908. In 1932 he was elected a vice president, and in 1936 president of the Association.

DIAMOND JUBILEE

The meeting of 1938 in New York City marked the seventy-fifth anniversary of the Association. In his presidential address, O. V. Brumley recalls:

75 years of achievement. . . . Within this period many important achievements have been attained, viz: cooperation with other agencies in the development of an indispensable live stock industry; the establishment of a veterinary educational system; the development of the sanitary sciences on a scientific basis; and the inauguration of many important public health programs. Research has added greatly to the knowledge of the medical sciences. . . Laws and regulations . . . have been placed on the statute books; veterinary associations have been organized . . . and veterinary practice has extended to nearly all sections of the North American Continent. The American Veterinary Medical Association has been, in a great measure, responsible for the successful development of these activities.

Noting "There will be many new problems to . . . be solved by a progressive, alert, scientific veterinary profession," Dr. Brumley called for increased public and professional relationships, better distribution of veterinary services, and "A definite program of public education . . . to acquaint the public with the numerous services of the veterinary profession."

Speaking on "Seventy-five Years of Progress in Veterinary Medicine," J. R. Mohler observes: "To the extent that we reflect on events within the last three quarters of a century, to that degree will our mental penetration into the future be aided and strengthened." Twenty-five years earlier, as president of the Association at its fiftieth anniversary meeting, Dr. Mohler had urged:

From the history of veterinary medicine let veterinarians draw confidence in the invincible strength of their science which though at one time despised even by the well-informed, has during the last five decades attained such great importance and such wide influence in the life of this and other countries. And let them take fresh courage and make new resolutions to rival all the other professions in useful work to be accomplished in the fifty years to come. . . . Gentlemen, I have no fear for the future of veterinary medicine.

As a reminder of what the veterinary profession had accomplished, Dr. Mohler lists some of its achievements:

Eradication of contagious pleuropneumonia, and of every outbreak of foot-and-mouth disease that has occurred in the United States, and the exclusion of other foreign animal plagues.

Practical eradication of bovine tuberculosis, and material reduction of Bang's disease, together with encouraging benefits from calfhood vaccination.

Discovery of the virus of hog cholera, of serum-virus immunization, and of crystal violet vaccine.

Discovery of the nature of tick fever, and a successful method of tick eradication, together with demonstration of insect vectors of disease.

A federal meat inspection service that has won world-wide recognition, and success in destroying trichinae in pork by refrigeration. The development of bacterins, aggressins,

The development of bacterins, aggressins, vaccines, antigens, dips and disinfectants, some of them highly specific and notably successful in reducing the incidence of a variety of diseases.

Perfection of a serological test for dourine, and practical eradication of the disease, and widespread eradication of scabies in cattle and sheep.

Discovery of a remedy for hookworm in dogs

which has been used successfully on millions of people.

Improvement in the diagnosis and treatment of bovine mastitis, and for diagnosis of pullorum disease in poultry.

Advancement in standards of veterinary education and of private practice, including hospitalization and use of biologics, anesthetics and x-ray.

Papers were presented on liver metabolism by C. E. Hayden, circulatory dynamics by H. H. Dukes and H. T. Batt, transfusion therapy by R. S. Amadon, diagnostic hematology by Fred Boerner, parasite diagnosis by R. E. Rebrassier, and bovine trichomoniasis by G. Dikmans. Also equine breeding hygiene by W. W. Dimock, hog cholera tissue vaccine by W. H. Boynton, milk hygiene by G. H. Hopson and by Ward Giltner, brucellosis vaccination by J. G. Hardenbergh and by C. M. Haring, kidney pathology by R. F. Langham and E. T. Hallman, and induced traumatic gastritis by R. W. Dougherty. And on poultry respiratory anatomy by W. M. McLeod, reproductive physiology by E. A. Hewitt, turkey paratyphoid by B. S. Pomeroy and R. Fenstermacher, epidemic tremor by Henry Van Roekel, and leukemia by M. W. Emmel.

That some things change but slowly is indicated by the fact that Dr. R. S. Mac-Kellar, Sr., a member of the local committee, was then characterized as "one of the oldest general practitioners in New York City." That other things do change - single rooms at the Hotel Pennsylvania were \$3.50, doubles \$5.00. Members of the official family, or who presented papers at both the fiftieth and seventy-fifth anniversary meetings included J. G. Hardenbergh, J. R. Mohler, Adolph Eichhorn, M. Jacob, Cassius Way, W. W. Dimock, and Ward Giltner. The International Veterinary Congress prize was awarded to G. H. Hart.

O. V. Brumley

Oscar V. Brumley was born at Leipsic, Ohio, March 8, 1876, and graduated from Ohio State in 1897. After graduate work in Berlin he returned to Ohio State, where he became professor and director of the clinics in 1910, secretary (1912), and dean of the College of Veterinary Medicine in 1929. His textbook on the diseases of small animals was a standard work for many years. Active in public health and humane work, he had served as president of the Columbus Board of Health in 1931, and had been elected president of the Columbus Humane Society the week before his death. He was president of the Ohio VMA (1910–1912) and secretary (1920). A member of the AVMA Executive Board from 1930 to 1936, Dr. Brumley was elected president of the Association in 1937. Re-elected to the Executive Board in 1939, he served as its chairman, 1940-1944. During his official tenure there was a major reorganization of the Association and an integration of the national and state associations. Dr. Brumley died January 13, 1945.

Spectre of State Medicine

On the subject of "Public Health and State Medicine," J. V. Lacroix observes in 1938:

The role of state medicine in veterinary practice is a question of vital importance to the veterinarian of today. No matter what the reaction of the individual practitioner state medicine has arrived. . . . Not only is state medicine indicated because of the already proven value of organized efforts in disease control but conditions now exist in the veterinary profession, particularly the lack of trained veterinarians, which are forcing the profession toward state medicine. . . If Eastern Iowa, where 85 per cent of the veterinary practitioners are said to be more than 45 years of age, is a criterion it may eventually be necessary for state medicine to control all veterinary activity in this country. At present there are not enough veterinarians to enlarge the veterinary program and there is no prospect of more becoming available soon. . . .

The private practitioner who makes full use of the state medicine facilities available to him need not feel antagonistic toward state medicine. There is a definite important place for progressive men in private practice who will employ modern methods in preventive medicine and who will make use of the facilities offered him by state medicine. Public health is not a problem for the physician alone, but it

must also be safeguarded by contributions of the veterinary profession.

On a local basis, however, Dean W. A. Hagan of the New York School viewed with some alarm the numbers of New York residents who desired a veterinary education:

I estimate that there are at least half as many residents of New York now studying veterinary medicine in institutions outside of the state as are enrolled in our own college. The total number will yield an annual crop greater than can easily be absorbed. . . . If these students would stay in the states that have accepted them as students, there would be no cause for complaint, but that is just what these students are not going to do. Within two or three years most of these men will be back in New York, particularly in the metropolitan area, which is their home, ready for practice. . . . Under the circumstances I think the time is ripe for strenghthening our state licensing examination, not with the idea of discriminating in any way against those who have obtained their education outside the state, but to make sure that only the really well qualified will be able to obtain licenses. . . .

A number of prominent members of the veterinary profession have been claiming that there is a very great dearth of veterinarians and that as a result much work that veterinarians might be doing was falling into the hands of other groups. Some of these men have criticized the veterinary schools for not devoting more time in their curricula to public health training. . . . So far as expanding greatly the public health work in the veterinary curricula is concerned, there simply is not time for it in a well balanced program. I do not think that we should be greatly exercised over the fact that in public health programs the veterinarian usually occupies a subsidiary place. . . . If veterinarians wish to qualify for this work, the same courses that are open to the others are open to them.

Taking note of an apparent trend of the times, Cassius Way, in his address as AVMA president in 1940, observes:

Perhaps we are heading toward a system of state medicine, subsidized practice, county service, or what not. It would seem advisable that the best minds in the profession should get together and take toll, balance the budget, so to speak, study the cause and effect and, if possible, evolve a solution.

Dr. Way did take a strong stand against certain types of "state medicine," including

encroachment upon veterinary practice by the Farm Bureau, and plans of colleges of agriculture to "organize farmers into an association to deal collectively for veterinary service. This sort of collective bargaining puts professional men on the basis of laborers."

On the matter of the wide radius over which some veterinary college ambulatory clinics were giving essentially free service, Dr. Way contends:

such "State Medicine" is directly contrary to the ideals held by such pioneers of the profession as Law, Liautard, McEachran and Moore. . . . The practitioner . . . has quite definite priority rights when it comes to the practice of veterinary medicine. . . . The practitioners and their clients support the state institutions as taxpayers. When a state institution gives free, or low-cost, medical treatment to the animals of private citizens, the taxpayers pay for it.

W. L. Williams, 84 years of age and still full of fire, takes vigorous objection to Dr. Way's statement concerning:

the ideals of Law, Liautard and McEachran, the three veterinary teachers of their day, with whom I was most intimately concerned and whose ideals in veterinary education I believe I understood fairly well. . . . During Law's directorship of the college [Cornell, of which Dr. Way was a graduate], we were in absolute accord . . . both believing firmly in the value of and necessity for free clinics. . . . Liautard evidently approved of my efforts and ideals. . . . After the free clinics had been established under Professor Law and myself, and Liautard had retired to his native land, he caused me to be made an honorary member of the Central Veterinary Medical Society of France. . . .

Principal McEachran, from whose college I was graduated 61 years ago, like Liautard . . . could not establish such free clinics as those at Cornell and elsewhere without financial ruin, but there are important evidences that he was not violently opposed to them. . . . The clinics initiated by Professor Law and myself constitute, in a large measure, an adaptation of Osler's ideals to the teaching of veterinary medicine. As far as I could see, McEachran and Osler held identical ideals regarding the teaching of medicine of man and animals, but neither of them was in a position at that time to put such ideals into effect. . . .

Way makes no allusion to the important fact that free clinics were impossible in private, unendowed veterinary schools, and that the introduction of free clinics in state schools helped sound the death knell of the former. The private veterinary schools had . . . required or advised that the student get his clinical insruction during the six-month interval between college sessions. . . . It would be extremely interesting if Dr. Way would submit, in tabuoutstanding lated form. surgical tions . . . contributions of economic importance to our current literature . . . [and] veterinary books largely used at present as texts . . . developed in America. Let him place in one column those developed in free college clinics and in another those introduced otherwise. . . . He would probably discover that the men in colleges supporting free clinics make a good showing. . . .

State veterinary schools are created and maintained that they may render valuable economic services to the state through the adequate training of students, that they in turn may, after graduation, render commendable professional service — not that they must enter upon lucrative trade activities.

1939

In asking for greater support of the AVMA at the 1939 meeting in Memphis, President H. D. Bergman urges:

Professional organization is the sole protection of every individual veterinarian in this country, regardless of his field of activity. . . . History definitely indicates that the advance of the veterinary profession has been directly related to the growth and development of its societies.

To compare favorably with medicine and dentistry, AVMA membership would have to be increased by about 25 per cent.

On veterinary journals, Dr. Bergman proposes:

our association should dominate the field of veterinary journalism in this country through maintaining facilities for the publication of whatever journals or other periodicals the profession will support.

The Committee on Public Relations proposed a popular veterinary magazine to:

Educate the public to a better appreciation of the significance of veterinary medicine . . . heighten appreciation of the A.V.M.A. on the part of members, non-members and the na-

tion's press . . . [and] help members to combat the encroachments of incompetent intruders and other influences inimical to the veterinary profession and to the best interests of animal husbandry.

Anticipated circulation of 35,000 copies was to be by direct mailing to clients or others designated by members, at the rate of \$3.00 monthly per 20 subscriptions (minimum) paid for by the AVMA member.

It was voted to institute a Board of Governors, to consist of the Executive Board chairman, the president, and the president-elect. Dr. H. Preston Hoskins, who had been secretary since 1922 and editor of the *Journal* since 1923, relinquished both posts in favor of L. A. Merillat, who served as executive secretary (1939–1940) and editor-in-chief to 1950. The name of J. W. Connaway was added to the Honor Roll. Dr. John R. Mohler was the recipient of the Twelfth International Veterinary Congress award.

Papers were presented on encephalomyelitis by H. W. Schoening, and by C. F. Schlotthauer; canine coccidiosis by F. X. Gassner, and bovine parasitism by D. W. Baker; pig mortality by L. P. Doyle, pig pneumonia by Frank Thorp, Jr., and hog cholera by H. C. H. Kernkamp; various aspects of brucellosis by A. Eichhorn, O. F. Huddleson, H. J. Metzger, and W. E. Cotton; mineral deficiencies by Hubert Schmidt; hemorrhagic septicemia by W. A. Aitken; and pneumonia in the horse by D. L. Proctor.

Rabies was a subject of intense interest because of recent outbreaks in various parts of the country, with discussions by L. T. Webster, M. D., R. A. Kelser, and others. Also enteritis by L. W. Goss; avian tumors by L. J. Goss, and tumors of small animals by Peter Olafson; and vitamins in small animal practice by M. L. Morris (read by C. W. Bower). Dr. J. W. Patton, whose work on so-called "fright disease" had attracted nationwide attention, discussed nervous disturbances due to avitaminosis B₁.

Artificial insemination of cattle, recently introduced in this country, was demonstrated at the clinic, following which the *Journal* editorialized:

the interest of practicing veterinarians in the recent revival of this centuries-old substitute for coitus has not been excited to the same extent as that of breeders of live stock. . . . Artificial insemination has a place in the practice of veterinary medicine only to the extent of our knowledge of its many details.

Later, it was urged, "artificial insemination is a responsibility of our profession."

Prior to the meeting, Dr. Bergman had prepared promotion material on "Veterinary Contributions to Human Health," emphasizing that man is subject to 70 animal diseases; the United States is the safest place in the world for livestock; and that discoveries by veterinarians had greatly decreased the number of hunchbacks from tuberculosis, had made possible the Panama Canal through work on Texas fever, and that hookworm treatment in man had followed discovery of a remedy for dogs.

H. D. Bergman

Henry Dale Bergman was born in Newton, Iowa, November 22, 1886, and graduated from Iowa State in 1910, following which he joined the staff as an assistant in veterinary medicine. After graduate work at the University of Chicago, he returned to the Department of Physiology and Pharmacology, becoming head of the department in 1916, and dean of the Veterinary Division at Iowa State in 1943, retiring in 1952.

Among other activities, Dr. Bergman was president of the Iowa VMA, chairman of the veterinary division of the Association of Land Grant Colleges, representative to the National Research Council, AAAS fellow, contributor to several revisions of the *National Formulary*, delegate to the International Veterinary Congress in 1930 and 1934, and AVMA president 1938–1939.