

## Union of East and West

THE ELECTION of W. H. Hoskins as secretary in 1888 in the beginning of the second quarter-century apparently boded good for the Association, for in June, 1890, the *Review* carried — for the first time — a lengthy “preview” of the annual meeting. This held the promise that the meeting to be held in Chicago — in itself a notable departure from tradition — would be:

the most important meeting held by the Association for many years. . . . It behooves every member . . . to consider his duty toward the growing West, and its vast number of earnest, hard working veterinarians, who should to-day be identified with our Association.

### REBIRTH IN THE NINETIES

Another innovation was the publication of an extra number of the *Review* as a full report (some 120 pages) of the Chicago meeting, which was characterized by W. L. Williams as “the birthday of the *true* National Association of the United States.” That the move to the West was a wise one is indicated by the fact that no less than five future presidents of the Association — not yet members — were present: W. L. Williams, L. A. Merrillat, Sesco Stewart, C. A. Cary and S. Brenton.

In his address of welcome, W. L. Williams called for “a strong reciprocal interest between the older and better organized profession of the East, and the younger

and now numerically equal body of Western veterinarians.” To this, President Michener responded:

We may arrogantly assume, that as of old, the wise men are in the East, but I must insist that the veterinary profession is an exception. . . . To-day we place the corner stone — the foundation of our Association has been building since June, 1863.

The acquisition of some 80 new members was somewhat marred by the dropping of some 40 for nonpayment of dues “and other causes.” Those dropped included H. J. Detmers and F. S. Billings, the latter for unprofessional conduct.

The Committee on Education, noting that men still “enter and graduate who can barely write their own names,” urged not only standard matriculation requirements, but “a collegiate or academic course of some kind prior to the student’s entering upon his veterinary studies.” This appears to be the first suggestion that a pre-professional requirement should be exacted. Veterinary textbooks then in use were censured as being behind the times. The need for adequate veterinary legislation was recognized, but this would not be a universal panacea for every ill. . . . The American people — not including politicians who make the laws — are a pretty level-headed lot, and in time will appreciate the distinction between the educated veterinarian and the quack horse doctor.

The Committee on Diseases reported the work of Theobald Smith on the parasitic organism of the blood in Texas fever, but had little to say concerning the role of ticks in transmission. On hog cholera:

The conclusion has been definitely reached that there are two separate and distinct diseases, the one known as hog cholera and the other known as swine plague.

The government program of slaughter for pleuropneumonia was recognized as so successful "that to-day the disease is thought to exist in only a very limited area around New York City." The fact that tubercle bacilli could be found in milk of cows with no lesions of the udder was emphasized.

Dr. Huidekoper reported having submitted a bill calling for creation of a Veterinary Corps, but was advised this was premature. A substitute bill calling for a veterinary division of the Quartermaster Department was being embarrassed by various other bills promoted "principally by veterinarians now in the employ of the Army."

Papers were read by D. E. Salmon on the work of the BAI, by R. S. Huidekoper on the foot of the horse, by A. Liautard on veterinary jurisprudence, and by Olof Schwartzkopf on meat inspection. Dr. Huidekoper was elected president, W. L. Williams, vice president, and Drs. Hoskins and Robertson were re-elected secretary and treasurer respectively.

Olof Schwartzkopf, a graduate of the Berlin school, came to this country in 1885 as an assistant to F. S. Billings. Like Billings, he was critical of the American veterinary profession because he advocated the German system of education, military veterinary medicine, and meat inspection. In this he undoubtedly was sincere, but his arguments were ill-timed. In particular, had he not personally insisted on a separate Veterinary Corps, it is probable that a bill giving all Army veterinarians an initial rank of first lieutenant would have passed in 1900 — nearly a half century before this became an accomplished fact.

It may well be that some of the previous

meetings would have appeared more productive had they been reported more fully, but it is evident that the Chicago meeting topped any other in a number of respects. Of perhaps the greatest importance was the change in the fortunes of the Association augured by the addition of new blood. So salutary the meeting seemed to have been that at a special meeting of the Comitia Minora in January, 1891, it was resolved: "That we recommend to the Association that the meeting for 1893 be held at Chicago and that it assumes an international character." This, of course, was in anticipation of the international flavor of the Columbian Exposition to be held there in 1893.

### 1891

The meeting at Washington, D. C., in 1891 was something of a disappointment following the success of the Chicago meeting the previous year. Only five "western" veterinarians were present, and only two veterinary colleges and one veterinary science department were represented: "Have our professors of veterinary science the good of their profession at heart? Their reasons for not attending would be interesting." The Special College Committee:

made the time-honored report that most of the colleges *avored* a three year college curriculum, but were prevented from attaining their desires through the shortcomings of some neighbor.

At the time the feeling was (and probably with some justification) that students would desert colleges that announced a three-year curriculum, and:

American veterinarians, with their deficient education and short college courses, yet manage through inherent enterprise and adaptability to maintain a high rank alongside their colleagues from the long-course colleges of other countries.

Papers were presented by C. C. Lyford on "Barren Mares," by W. L. Williams on "Rachitis," and by R. S. Huidekoper on "Identification of Animals." The Hon. J.

M. Rusk, Secretary of Agriculture, spoke of:

the mutual interests of agriculture and veterinary science, and of the inestimable and essential value of . . . the [veterinary] profession when our national wealth is threatened by contagious and epizootic animal diseases.

In his presidential address, R. S. Huidekoper observed:

The Association has assumed a size and standing which now make the success of its meetings not only of consequence to the personal comfort and satisfaction of those attending, but the larger meetings and the character of the subjects which are brought before them are reflected over the community, who will judge us and our merits and worth by the opinion which we ourselves form of each other.

The committee which had been appointed to investigate the establishment of "a central legalized body of veterinarians" was dissolved without making a report — to the dismay of Dr. Liautard, who urged:

Consolidation and union for veterinarians, as for all others, means strength . . . elevating our standard and influence, and our usefulness in the general domain of science.

And while he credits a proposition to limit membership to graduates of three-year schools with having been: "submitted with the best of intentions . . . of elevating our professional standards," he questions its practicability:

The Association has a right to establish rules for its own guidance, and will not the consequence naturally follow that when they find themselves thus excluded from the Association, they will on their part forthwith turn their backs upon the body which ignores them?

Liautard's own school, of course, had a two-year curriculum.

## 1892

The meeting for 1892 was held in Boston. Once a stronghold of Association activities, this was to be the last meeting there for more than half a century, a fact

alluded to by the Governor of Massachusetts in welcoming delegates to the 1946 meeting.

A major step was taken in the unanimous adoption of an amendment requiring that any future applicant for membership:

shall be a graduate of a regularly organized and recognized veterinary school, which shall have a curriculum of at least three years, of six months each, specially devoted to the study of veterinary science, and whose corps of instructors shall contain at least four veterinarians.

Despite Liautard's earlier open opposition to the three-year curriculum, he notes, concerning the Association's stand:

today it has not only become the accepted representative body of the veterinary profession of America, but has acquired such a weight of authority as to enable it to initiate and establish a movement towards which for years many veterinarians have vainly (because singly) worked, to wit: the establishment upon a permanent foundation of an advanced and uniform standard of education for veterinarians in the United States.

The admission of 101 new members marked the largest accession in the history of the Association — more, in fact, than comprised the total active membership less than a decade earlier. Wm. H. Welch, M.D., of the Johns Hopkins University, Prof. Auguste Chaveau, the celebrated French anatomist, and Isaiah Michener were elected to honorary membership. W. L. Williams was elected president, and A. W. Clement, vice president; W. H. Hoskins was re-elected secretary, and J. L. Robertson, treasurer.

Papers were presented by Olof Schwartzkopf and W. L. Williams on food inspection, and by Williams on veterinary science in agricultural colleges. In speaking on the work of the BAI, D. E. Salmon reminds his listeners:

it is one of the objects for which this Association exists, to promote and encourage scientific research . . . and that any criticisms will be fair and truthful . . . to bring out points which may have been obscure, or to call attention to conclusions which may be untenable.

... Our great need is that we should have more original investigations.

Salmon was rankling over a report issued by the Committee on Intelligence and Education, which severely criticized the work of the Bureau as not having "a creditable appearance to other civilized nations," and commended the work of Billings. Salmon characterizes the report as:

misrepresentation . . . calculated to bring reproach upon our Department of Agriculture, our scientists, our institutions, and our country . . . to retard the progress of science.

He then offers an effective rebuttal to the committee report and accurately states the position of the Bureau. In conclusion, he asks:

Does this Association take no pride in the investigations of the Bureau of Animal Industry, or does it propose to stigmatize them as a disgrace to the veterinary profession . . . as ignorant, incompetent and dishonest on the evidence which has been submitted?

It would seem fair to state that a majority of the profession sided with Salmon by this time; Billings had been expelled from the Association two years earlier.

### A Question of Ethics

In response to a paper on "Barren Mares" read earlier by C. C. Lyford, in which he recommended the use of a patented cervical dilator, W. H. Hoskins:

was very much interested in the paper . . . but objected to the right of the essayist to bring in here a patented article. That the Association under their present laws, could not recognize specific plans of treatment, patented articles or proprietary remedies.

Dr. A. H. Baker of the Chicago Veterinary College "did not believe this Association should denounce patented articles," and past-president W. B. E. Miller, in agreeing with Dr. Baker "could not see any comparison between patented impregnators and proprietary medicines," and while he was not in favor of "promiscuous advertis-

ing," notes, "We are the only people in existence who do not advertise." To this Dr. Hoskins replied that it was:

an established rule in this Association by usage and by the Constitution and by-laws and code of ethics, from its formation in 1863, that we take no cognizance of patented articles, or in any article that any member of this Association should seek a patent for. Any instruments of value, any plan of treatment, specific in character or of great good, that any member discovered, it was his duty to impart it to us and our right to request it, further that we were not banded together for individual but for mutual advancement.

On another "ethical" matter, the perennial subject of uniform minimum fee schedules for veterinary services is not of purely recent vintage. In 1895 the Maine Veterinary Medical Association adopted the following schedule:

Office consultation . . . . .	\$ 1.00
House calls . . . . .	1.50
Night calls . . . . .	2.00 to \$ 5.00
Country visits, per mile,	
one way . . . . .	1.00
per mile, after first mile . . .	.50
Per day . . . . .	10.00 & expenses

### OPERATIONS

Castrating colts . . . . .	\$ 3.00 to \$ 5.00
Castrating horses . . . . .	5.00 to 10.00
Castrating ridglings . . . . .	10.00 to 15.00
Castrating small animals . . .	1.00 to 3.00
Floating . . . . .	1.00 to 3.00
Firing . . . . .	5.00 to 10.00
Neurotomy . . . . .	5.00 to 10.00
Parturition . . . . .	5.00 to 10.00
Phlebotomy . . . . .	3.00
Quittor . . . . .	10.00 to 15.00
Removing placenta . . . . .	3.00 to 5.00
Removing molars . . . . .	3.00 to 5.00
Removing tumors . . . . .	5.00 to 10.00
Spaying bitches . . . . .	3.00 to 5.00
Tracheotomy . . . . .	3.00 to 5.00
Minor operations requiring	
casting . . . . .	5.00

At this time the cost of a veterinary education ranged from as little as \$400 at some of the two-year schools — for one who lived at home — to as much as \$1,800 at a three-year school, including room and board. An income of \$1,200 was considered good for a recent graduate; estab-

## The Michigan Capitol Veterinary Medical Association

This minimum schedule of prices has been adopted by our Association as a guide in making charges for veterinary services, to be adhered to by our members so far as local conditions will warrant.

<b>Country calls.</b>		<b>Minor operations.</b>	
For the first visit	\$1.00	Forming spurs and ringbones	\$5.00 up
Each additional visit, one way	.50	Opening abscesses	1.50 up
Medicine additional.		Amputation of tail, ear, etc.	.50 up
		Shoulder tumor and abscess	5.00
<b>City calls.</b>		<b>Major operations.</b>	
Equine and bovine	\$2.00 up	Fixing of the withers	\$10.00 up
Cattle and feline	1.50 up	Quarter operation	10.00 up
Medicine additional.		Pull evil	10.00 up
Night calls after 8:00 p. m. city and country not distant	1.00 up	Roaring operation	15.00 up
<b>Consultation.</b>		Undiluted hernia	10.00 up
Fee	\$1.00 up	Ventral, scrotal and inguinal hernia	15.00 up
<b>Hospital fees.</b>		Amputation of the tail, equine	5.00 up
Equine and bovine, per day	\$5.00 up	Amputation of the penis	15.00 up
Cattle and feline, per day	50 up	Trimming of the ears, canine	2.00 up
Medicine additional		Rumencotomy, bovine	10.00 up
<b>Prescription.</b>		Trenching the facial sinuses, equine, encephala	10.00 up
Office	\$0.50 up	Trenching to remove tooth	10.00 up
<b>Obstetrical work.</b>		<b>Neurectomy.</b>	
Care, dry cows	\$1.00 up	Digital, unilateral and bilateral	\$5.00 up
Mare, dry cows	10.00 up	Volar and plantar, unilateral and bilateral	5.00 up
Cattle and feline, dry cows	5.00 up	Median	15.00 up
Mare, dry cows	5.00 up	Tibial	15.00 up
Extraction of the uterus	5.00 up	<b>Tenotomy, myotomy and myectomy.</b>	
Removing placenta, etc. and mare	5.00 up	Pleuro tenotomy	\$10.00 up
<b>Tuberculin testing.</b>		Pneumonia and cancer	5.00 up
Single animals in hospital	\$1.00 up	Caudal	5.00 up
Three animals in hospital	10.00 up	<b>Castration and spaying.</b>	
Twenty head or under in the country	20.00 up	Cryptorchid, equine	\$12.00 up
Additional per head over twenty head	1.00 up	Equine, single, two years and under	2.00 up
<b>Malignant test.</b>		Mullions	5.00 up
	\$1.00 up	Bovine, canine and feline	1.00 up
<b>Hog cholera vaccination.</b>		Omphalocectomy, bilobed	5.00 up
hospital charges and per hour	\$1.00 up	Omphalocectomy, mare	15.00 up
		<b>Fractures.</b>	
		Equine and bovine	\$5.00 up
		Canine and feline	5.00 up

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Most of the early fee schedules were adopted as an attempt to eliminate "price-cutting" by suggesting minimum fees; some, however, give the impression of an attempt to rigidly standardize fees on a fixed basis.

lished practitioners expected to make \$3,000–4,000, and some made considerably more. Government and institution salaries ranged from \$1,500 or less for instructors, to \$3,500 for the Chief of the Bureau of Animal Industry.

### W. L. Williams

Walter Long Williams, V.S., was born in 1856 near Argenta, Illinois. After teaching in a rural school two years, he entered the Illinois Industrial University (now University of Illinois) in 1875. Transferring to the Montreal Veterinary College, his tutelage under William Osler was an inspiration for his later painstaking studies in the problems of reproductive pathology.

In the 1880's he recognized dourine in horses in Illinois and was largely responsible for much of our knowledge of this disease. In 1896 he became Professor of Veterinary Surgery, Obstetrics, Zootechnics, and Jurisprudence at Cornell University, where he was responsible for many innovations in veterinary teaching until his retirement in 1921.

A prolific writer, he contributed many articles to the veterinary journals both here and abroad, and was the author of two classic texts: *Veterinary Obstetrics*, and *Diseases of the Genital Organs of Domestic Animals*—long familiar to most veterinarians. Long active in Association affairs, Dr. Williams served as president of the

Illinois VMA (1889), USVMA (1892–1893) and the New York Veterinary Medical Society (1906, 1907).

After his retirement from teaching he remained active in professional affairs and was a familiar figure on the Cornell campus until shortly before his death on October 23, 1945, at the age of 89. For many years he was affectionately known as “Uncle Billy.” In 1944 this writer had the privilege of hearing him address the New York State Veterinary Medical Society on his 65 years in the profession. Much of Dr. William’s work is considered at length elsewhere in this book.

### 1893

The thirtieth annual meeting of the USVMA and “First International Veterinary Congress of America” was held in Chicago at the time of the Columbian Exposition in 1893. The principal evidence of an international character, however, was the election of eleven foreign veterinarians as Honorary Members of the Association, and: “an honorary membership in the Congress was conferred upon some thirty-three members of the profession, covering some twelve countries.” There were no foreign veterinarians in attendance.

Extensive consideration was given to the report of the Tuberculosis Committee, which concluded:

That while it may not be practicable at present to undertake the complete eradication of the disease, each State should at least institute a thorough examination of the herds to determine its prevalence. The question of a radical attempt to stamp it out should be agitated; owners of cattle should be apprised of its dangers, all tuberculous cows should be removed from dairies, and all meat should be subjected to a veterinary examination at the time of slaughter.

In speaking of the status of the Association, W. L. Williams notes an increase in membership by 75 per cent in the past few years, and:

Aside from enlarging the scope of the Association and reaching over large territory, the chief change has been in regard to the admission of members. . . . For the first time in the

history of our Association many applicants have been refused admittance.

The three-year college requirement, he notes:

excludes from possible membership the future graduates of a vast majority of veterinary colleges in America. . . . Several of these are anxious to have a cloak of respectability thrown over them through the recognition by us of their graduates . . . evidence of the growing power of our Association, and of the correctness of our move for a higher standard of education.

It is very clear to you all that we have in this country a number of veterinary colleges which are mere diploma mills, without professional existence or aspiration. . . . They admittedly sacrifice professional training to money-making . . . [and] are rapidly crowding our professional ranks with incompetent men distinctly in excess of the demand.

On the matter of the size of the Association, a comprehensive — although perhaps not complete — listing (in 1893) of members since 1863 gives a total of 550 in these 30 years, of which 302 were listed as active members for 1893. Many of these had been added in recent years, for it had not been long since the Association had only passed the 100 mark. There were 109 listed as dropped for nonpayment of dues, 21 deceased, 4 resigned, and 7 expelled. There are some obvious discrepancies, however, for only 18 of the 40 founders are listed; a number of those not listed are known to have died. Seven of the founders were still active members: John Busteed, Charles Burden, O. H. Flagg, Alexandre Liautard, Isaiah Michener, J. Penniman, and J. H. Stickney. As a matter of passing interest, Dr. Stickney, first president of the USVMA, was nominated for this post, but his name was withdrawn because he was not present at the meeting.

The Raynor brothers, Joseph and Thomas, deserve mention at this point. Both were present at the organization meeting in 1863, but were among several who withdrew; according to an unpublished manuscript of W. H. Hoskins this was over some question of scruples. Both were known as eminent practitioners of high integrity. In 1864 Robert Jennings attempt-

ted to have Thomas Raynor listed as a charter member of the USVMA, but neither he nor his brother became active in Association affairs until the 1880's. For another 20 years or more both were closely identified with veterinary activities in Pennsylvania, and with the USVMA, Thomas becoming a vice president a few years before his death in 1908. Their father, who had emigrated from England in 1842, was a veterinarian, as were three other sons; the five brothers each practiced for more than 50 years. James, who died in 1905, is stated to have been one of the possibly not more than two or three graduates of the Veterinary College of Philadelphia, headed by Jennings until it closed in 1866.

The Committee on Education reported:

We find that veterinary education is far in advance of what it has been in the past. . . . Increasing demands for a higher and a more complete education have led to great improvements in our colleges during recent months . . . but we recognize also that there is much room for further improvement.

The committee's recommendations, spelled out in detail, are essentially those that had been advocated for some years, "a uniform matriculation examination, which must be rigidly enforced, a uniform curriculum, and a uniform length of study."

Concerning the veterinary exhibits at the Columbian Exposition, W. L. Williams observes:

It is difficult for some industries or professions to exhibit their triumphs to a body of mixed visitors in such a manner as to interest and instruct a reasonable number of the passing throng. . . . In so far as veterinary science is related to human health it naturally follows the historical antipathy of human medicine to public display of its achievements, because probably of the practical impossibility of making such exhibit without permitting the insinuation of some form of quackery . . . but in its relation to economics . . . there is certainly scant reason to hesitate making properly designed exhibits.

The BAI had an extensive and splendid exhibit depicting its work in the eradication of animal diseases. While the veter-

inary schools of France had large exhibits, those of the United States were not represented. The agricultural colleges, however, had a large and unified presentation consisting of models, skeletons, pathological specimens, and instruments used in teaching and practice. This was under the direction of Dr. E. A. A. Grange of the Michigan Agricultural College; a horse skeleton specially prepared for this exhibit is still in use at Michigan State University.

The matter of incorporation of the Association was again discussed — and tabled, over the objections of F. H. Osgood: "we have been procrastinating and putting it off, not for a day, but years." The seal of the Association was adopted as an official emblem: "One the size of a quarter of a dollar, for bill-heads and letter-heads, and one the size of a dime, which may be used on visiting cards if so desired," but only after incorporation of the Association — which was deferred until 1917 (as AVMA — and thus the emblem did not come into use).

Papers were read on millet disease in horses, periodic ophthalmia, fistula, biliary hepatitis in cattle, contagious pleuropneumonia, inspection of southern cattle, swine plague and hog cholera, veterinary education, and the history and prospects of the veterinary profession. Upon satisfactory demonstration that pleuropneumonia no longer existed in either the United States or Canada, a resolution requesting the lifting of the mutual embargoes on the shipment of cattle between these countries and by Great Britain with regard to American cattle was adopted. Another resolution deplored the degrading of the Bureau of Animal Industry "to the shameful basis of the 'infamous spoils system.'"

W. H. Hoskins was elected president; A. W. Clement, vice president; T. J. Turner, secretary; and J. L. Robertson, treasurer.

### EMPHASIS ON EDUCATION

At the 1894 meeting in Philadelphia it was decided to reinstitute the earlier practice of having more than one vice president of the Association, and representatives of

the eastern, central, and western segments of the profession were elected: J. F. Winchester of Massachusetts, T. J. Turner of Missouri, and W. L. Williams of Montana, respectively.

C. P. Lyman reported that an act of incorporation of the USVMA had been drawn up and presented to Congress through Senator Lodge of Massachusetts. In February, 1893, Senator Lodge had advised:

It is now too late in the session to do anything with any new bill in this Congress, but . . . I think there will be no difficulty in getting it through Congress at the next session. These bills are usually passed without objection. [And in December] I will present and introduce your bill, with pleasure. . . . When it gets to the House it will require more looking after to prevent it from being pigeon-holed.

But in March, 1894:

The bill is in the Committee on Military Affairs [another "veteran" fiasco?] . . . . Just now, however, I am so absorbed in the tariff, that it is very difficult for me to give attention to anything, but I will try to do the best I can.

After some months of inaction, Wm. Dougherty, upon his third trip to Washington in the interest of the bill, "after some pretty hard work, located the bill in the Committee on Agriculture and Forestry, where it still remains." Senator Lodge had at least introduced the bill, but the Association was not incorporated until 1917, and then under the laws of Illinois.

C. A. Cary, as Chairman of the Committee on Education, recommended that each veterinary college have a full professor for each of eleven departments (including Physics and Latin). Too many teachers, he felt, were "practical M.Ds. and theoretical veterinarians . . . not qualified to become expert professors in Veterinary Medical Colleges."

Speaking for the Committee on Diseases, Leonard Pearson notes:

It is a lamentable fact that we are dependent, almost wholly, for our knowledge of comparative pathology upon the foreign schools

. . . [because] the public has not been brought to see the importance of exact knowledge in regard to the intricacies of comparative pathology, and it has never been willing to pay for work that would lead to these ends.

In response to a letter from a local minister, a resolution was adopted condemning:

the operation of "docking" horses' tails as an operation of fashion . . . but so long as it is demanded . . . we believe that it should be performed by skilled veterinarians . . . and we cannot unqualifiedly condemn those who perform the operation.

The Virginia State Association protested against this as "a decided straddle of the question," and went on record as unqualifiedly condemning the practice; moreover, "We . . . pronounce the docking [of] tails a cruel and barbarous practice."

W. H. Hoskins was re-elected president, and J. L. Robertson, treasurer; Leonard Pearson was elected secretary.

### Association of Veterinary Faculties

W. H. Hoskins, as Chairman of the Committee on Congress of Colleges, reported the formation of an Association of Veterinary Faculties of North America with C. P. Lyman as permanent president. Dr. Lyman spoke of:

the great encouragement that the movement had met with, and already felt that a great deal had been gained by this commingling of these various representatives, and a better understanding had been accomplished among the schools.

However, Dr. Liautard, who had not been in attendance, later protested in a lengthy letter challenging the constitutionality of the organization: "By what authority does the 'self-named' Association of Faculties exist?" While his school was represented in the group, he objected to the apparent fact that the Association had been rather informally organized by "a few persons engaged in teaching in some of the veterinary colleges." Instead, he urged that the board of trustees of each college appoint a delegate.

As noted by Merillat and Campbell, from the outset the meetings of the Association:

were battlegrounds for a war between the various schools over entrance requirements, length of the course and the curricula. . . . In the beginning the private schools fought one another. . . . Eventually the private schools were lined up uniformly against the state schools. . . . The desideratum in the imbroglio was students. The state schools did not want the private schools to steal them by means of low entrance requirements and a short term. The private schools did not want to lose them to the prestige of state institutions. . . . The fallacy . . . was probably difficult to see at the time . . . there has been no time since 1890 when the reputation for giving a good course did not attract more students than the reputation for low entrance requirements and a "diploma come quick."

### 1895

There was but meager attendance at the 1895 meeting in Des Moines: only twenty-five members answered roll call the first day. The Association, moreover, was without funds, primarily because the printing of the proceedings of the meetings in two previous years (1892, 1893) had cost more than was taken in from dues. Accordingly, the dues had been raised from three to five dollars—thus creating another problem: despite increased membership, the actual income from dues was decreased by delinquencies.

In his report as Chairman of the Committee on Education, C. A. Cary observes:

The United States is still blessed with a superabundance of veterinary colleges. One in Iowa, one in Illinois, one in Ohio, one in Pennsylvania, one in Massachusetts, two in New York State, and one for the entire South would more than supply the demand. It seems that all the small men in the profession have gone wild on the necessity of having a place in a college . . . . The faculties of nearly all of the private schools are made up of local men who will work for prestige—a kind of practice prestige.

He suggests that graduates of agricultural colleges with veterinary instruction should receive a year's credit in the recognized three-year veterinary colleges.

In response to objections over the teaching of veterinary science to agricultural students, W. B. Niles counters:

the instruction received does not tend to produce empirics, but . . . always tends to a higher appreciation of the science, and impresses the student with his incompetency to deal with all classes of cases.

Most of one day was spent in a discussion of the tuberculosis problem and resulted in a resolution "indorsing the tuberculin test and condemning physical examination only as unreliable, and microscopical examination of dairy milk as deceitful and unwise in the present day."

Some appreciation of the importance attached to the tuberculosis question at this time may be had from the fact that at a subsequent meeting of the Section on Public Health of the New York Academy of Medicine, papers on this subject were read by F. H. Osgood, Leonard Pearson, H. D. Gill, and James Law.

Papers were read by Olof Schwartzkopf on antitoxin production, by Tait Butler on accidents in casting animals, by S. J. J. Harger on roaring, by M. H. McKillip on plantar neurectomy, by W. L. Williams on colic, by M. H. Reynolds on hypodermic cathartics, and by J. C. Meyer on anesthetics in horses, which included a practical demonstration—perhaps the forerunner of the clinical demonstrations featured at later meetings.

W. H. Hoskins was re-elected for an unprecedented third consecutive term as president; F. H. Osgood, C. C. Lyford, and R. H. Harrison were elected eastern, central, and western vice presidents, respectively; Sesco Stewart was elected secretary, and J. L. Robertson, treasurer.

### W. H. Hoskins

William Horace Hoskins, D.V.S., was born in Rockdale, Pennsylvania, July 23, 1860. In 1881 he graduated from the American Veterinary College, following which he spent the greater part of his professional life in Philadelphia, in practice, business, politics, and teaching, the latter

at the University of Pennsylvania where he taught veterinary jurisprudence, ethics, and business methods. During much of this time he also edited the *Journal of Comparative Medicine and Veterinary Archives*. In 1917 he became Dean of the merged New York–American Veterinary College, where he also taught jurisprudence and clinical medicine.

A strong association man, Dr. Hoskins was closely identified with the AVMA, the Pennsylvania and Keystone Veterinary Associations, and was an honorary member of several other state and regional groups. His record of attendance at 39 consecutive AVMA meetings (from his graduation until his death) probably has never been equalled. In addition to serving on numerous influential committees, he was secretary of the USVMA from 1888 to 1893, and president from 1893 to 1896. He served as president and as secretary of the Pennsylvania Board of Veterinary Medical Examiners, and was nominated for mayor of Philadelphia. In addition, he kept up numerous business interests as well as his practice while residing in Philadelphia.

Of him, the *Journal* states upon his death on August 10, 1921:

As a successful practitioner, Dr. Hoskins ranked among the foremost in the United States, but he was never too busy nor too fatigued to take an active interest in all movements intended to elevate and promote the profession. He was an ardent advocate of a high standard of veterinary education, and his articles in veterinary publications and addresses before public gatherings accomplished much in helping to raise our standard to where it is now. He devoted much energy and time for twenty-five years to secure legislation in the interest of the Army veterinary service, and what has been accomplished was largely through his persistent efforts.

Time has demonstrated that one of his greatest legacies to the veterinary profession was his son, H. Preston Hoskins, longtime editor of the AVMA *Journal*.

## 1896

At the 1896 meeting in Buffalo, W. H. Hoskins notes in his presidential address

that the depressed economic situation in the past few years:

has shown the way to broader fields of labor and opened full wide a domain of usefulness in sanitary work unlimited in scope, where all mankind may reap the greatest benefits, and which will command for us the highest need of praise and admiration.

In this connection he observes:

training men to minister to the ailments of the lower animals . . . is an essential and worthy object, [but] the school has a higher purpose—that of demonstrating the relations in which such diseases stand to the welfare of the human family. . . . The day is not far hence when this must be the aim and purpose of every veterinary school in our land.

In a comprehensive discussion on tuberculosis it was recognized that while:

there exists in some quarters a difference of opinion as to the relation of tuberculosis among cattle to the public health . . . it is the opinion of the United States Veterinary Medical Association that . . . tuberculosis of man and cattle is identical.

Not only is the disease transmissible through milk from tuberculous cows, but:

Tuberculin furnishes incomparably the best means of recognizing tuberculosis in the living animal . . . [and] is entirely harmless to healthy cattle, and is . . . exceedingly accurate.

At the time, tuberculosis eradication was being hampered by claims that the disease in cattle was not a public health problem, and that the use of tuberculin would infect healthy cows.

The Committee on Army Legislation reported that action on a bill calling for the rank of second lieutenant for Army veterinarians had been blocked by a “do-nothing” Congress, and by the Quartermaster-General who maintained:

we should be made civilian employees, hired by contract at so much a month . . . the result of which would make about twenty nice political appointments . . . so we devoted our entire time toward manufacturing sentiment among



Scene in the forge at the University of Pennsylvania School of Veterinary Medicine in 1885.  
Michigan State University Library

the members [of Congress] and working with the committees.

The Committee on Education noted:

Of the 17 schools heard from [of 18], 14 require a three-years' course of study; 4 of them required this before the question was agitated by this Association, one, just established, voluntarily, leaving nine to the credit — are we not right in saying it? — of the earnest efforts of this Association.

This left the matriculation examination as:

the most important matter that we have to contend with . . . While the three New York colleges must submit to the Regents' veterinary student certificate . . . some of them [specify only] reading, writing and spelling; one . . . while so specifying, allows those who fail to enter upon their professional studies, provided they pass the examination before the beginning of the second year.

In speaking on "Some Experiences in the South," W. H. Dalrymple observes:

Veterinary medicine and surgery, in the more Southern States, are still in their infancy; but through the influence exerted by the reputable

graduate the people are beginning to realize the value of intelligent aid in the care and treatment of their animals, in contradistinction to the illiteracy and superstition of the empiric, who is usually in the habit of compounding his mysterious nostrums at certain phases of the moon and performing his so-called operations under similar lunar conditions.

He reports an outbreak of anthrax that spring which "depopulated great herds of cattle, mules, and sheep," and which had exhausted the supply of vaccine — once he had "upset the calculations of the illiterate 'charbon doctor.'"

The subject of veterinary instruction for horseshoers in schools of farriery was discussed at length, some siding with the Master Horse-shoers Association in advocating that pathological as well as normal structure of the foot should be taught. The majority, however, apparently agreed with Dr. James McDonough, who had been a practical blacksmith, that the Association should beware of "nursing a viper by making half-educated foot experts."

In speaking on "The Need for Veterinary Education in Medical Colleges," E. P. Niles notes:

A few years ago it seemed to be a matter of little importance whether a physician knew anything of the infectious diseases of the lower animals or not, but since the researches in bacteriology have opened up a comparatively new field of science we are forced to admit that contagious and infectious diseases are due to a specific micro-organism and that certain micro-organisms are capable of causing disease in both the higher and lower animals. . . . The physician of this day and age should, to a certain extent, be an investigator. He must know comparative pathology. . . . A veterinarian as a member of the faculty of every medical college, is, therefore, indispensable in this day and age.

Other papers were presented by D. E. Salmon on avian tuberculosis, A. T. Peters on serum therapy in hog cholera, L. A. Merillat on veterinary dentistry, and Leonard Pearson on "The Field of Veterinary Science." F. H. Osgood was elected president; Sesco Stewart, secretary; and J. L. Robertson, treasurer of the Association. As a matter of some interest, this was the first meeting of the Association to be attended by the wives of veterinarians.

## 1897

At the 1897 meeting in Nashville, president F. H. Osgood called attention to some of the undesirable features of electing the president, i.e., by nomination and a majority vote of those present at the meeting—following which the chair was turned over to the new president. Suppose a new president "is opposed to the policy advocated in the annual address of the retiring president. Must a year be lost before the new party have opportunity to declare its policy?"—thus leaving only a day or two for action to be taken on his recommendations before another man is elected. Also:

each member who desires to vote for the Association's officers must pay for that privilege the exact sum which it costs him to leave his business . . . to travel . . . and support himself while absent.

Dr. Osgood also suggested that voting rights on business matters should be invested in delegates from constituent associations to prevent a miscarriage of the will of the membership through the preponderance of "self-appointed" delegates from the region near the place of meeting. These objections were later recognized as valid by establishment of the House of Representatives in 1934.

Citing "the great help that will come to us all from professional unity," Dr. Osgood suggested:

the desirability of changing the name of this Association to that of the National Veterinary Association of North America. . . . The professional and economic union between certain parts of the United States and British North America, is now as close, as far as *our* mutual interests are concerned as it is between one and another of our States.

This suggestion did result in a name change the next year, following the tabling of a resolution by A. W. Clement in favor of "The American Veterinary Medical Association."

As Chairman of the Committee on Diseases, Theobald Smith notes that the stipulated function of the committee, "to investigate the character and extent of prevalent diseases throughout the United States," was in need of revision:

The need of the present is not diffusiveness . . . but concentration . . . upon some one theme, to give those who know something about it a chance to impart their knowledge . . . and those who do not know, the opportunity to listen.

As a matter of interest, Smith had been proposed for honorary membership some years earlier, but was refused because he was eligible for regular membership as a physician. At the Nashville meeting he resigned his active membership and was elected an honorary member of the Association.

Tuberculosis was again the major topic for discussion. J. M. Parker notes:

there has been too great a tendency, among members of the profession, to look upon every-

thing as secondary to the question as to whether a cow reacted to tuberculin or not. . . . The important question of wholesome milk . . . the value of cleanliness and light, ventilation and drainage . . . should receive greater attention . . . [but] I would not neglect tuberculin.

The ensuing discussion between Drs. Salmon, Pearson, Law, Cary, and Lowe — all future presidents of the Association — would be of interest today to anyone engaged in tuberculosis eradication.

D. E. Salmon was elected president; Sesco Stewart, secretary; and W. H. Lowe, treasurer.

### EXIT USVMA; ENTER AVMA

The thirty-fifth annual meeting at Omaha in 1898 was the last to be held as the United States Veterinary Medical Association. Acting upon the recommendation of the Executive Committee, it was unanimously voted to change the name to the American Veterinary Medical Association. On the matter, President Salmon had urged:

This proposition is in line with the growth and development of this body. . . . Some disadvantages . . . will probably be more than counterbalanced by the wider range of our vision and the nearer approach to a cosmopolitan character.

Dr. Salmon reviewed the recent progress in animal disease research, noting:

there is nothing more remarkable than the influence which the study of animal diseases has had upon the advancement of human medicine, and the resources which the investigators of this subject have laid at the feet of suffering humanity. The elucidation of the nature of contagion; the establishment of scientific disinfection; the development of aseptic surgery; the introduction of bacterial products, vaccines, animal extracts and antitoxins for the treatment of various diseases are well-known examples.

The work of the Association, he urges:

must be principally of an educational nature. It should begin with its own members, encourage them to study, to think and to write. It

should particularly encourage original observation and investigation. . . . It should also be active in educating public sentiment. . . . Convince the people of the various municipalities that we are laboring to save their property and to protect their health, and it will be strange indeed if we meet with opposition.

In particular, he urged more attention to meat and milk inspection, and the eradication or control of hog cholera, tuberculosis, Texas fever, glanders, sheep scab, and rabies.

A proposition to increase the term of the presidential term from one to two years, Dr. Salmon deemed:

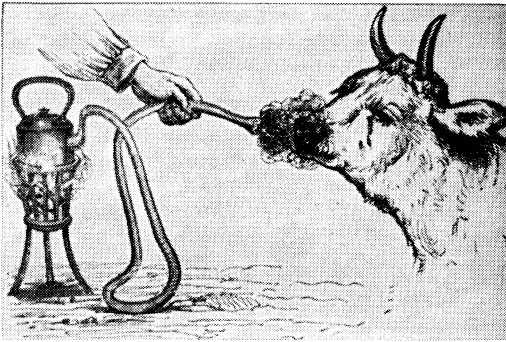
ill-advised and undesirable. We have had numerous members of this association who should have been honored with the presidency but for whom the opportunity has never come. If we double the length of the term, we lessen by fifty per cent the chances of every member to gain this distinction, which should be coveted by all.

In the 34 years preceding Salmon's election, there had been but 18 presidents, only seven of whom had served but a single term. Since then, only two presidents have served for two years: C. J. Marshall, because no meeting was held in 1914, and James Farquharson, during World War II.

At the first AVMA clinic, held in a barn on Capital Avenue:

The first operation was upon a ridgling by Dr. George A. Scott, of Independence, Iowa. . . . Dr. L. A. Merillat, of the McKillip College, Chicago, now stepped forward and announced that he would perform on . . . an extremely bad roarer . . . his new operation of "arytenoidrraphy," and did so to the delight of all. He is a cool surgeon, and . . . his method was very favorably commented upon. At the conclusion of the operation, and while the patient was still under chloroform narcosis, Dr. W. L. Williams, of New York, began the removal of the ovaries from a vicious little old mare.

An exhibit of some interest was an "ingenious" portable "vapor and medicated bath" for horses: "An alcohol stove within this tightly closed room quickly raises the temperature to . . . about 180°F., when the animal will be thrown into a profuse



Steam medication, ranging from administration by simple devices to elaborate vapor baths, was popular for respiratory and other ailments during the nineteenth century. Clater-Armatage: *Cattle Doctor*

perspiration.” A similar device had been advocated by George Dadd in his *Modern Horse Doctor* (1854), and in 1818, James Carver of Philadelphia had advertised his “Patent Universal Veterinary Medical (vapor) Bath” in his ill-fated *Farrier’s Magazine*.

The subject of meat inspection occupied a large part of the program, with presentations by W. H. Hoskins, D. E. Salmon, Leonard Pearson, C. A. Cary, James Law, and Sesco Stewart. This panel is notable for the fact that it consisted of the president, a past-president, and four future presidents of the Association. This was followed by a visit to the Cudahy Packing Company to inspect an exhibit of pathological specimens collected by the local inspectors of the BAI. This proved to be “the most complete and extensive exhibit probably ever held in the world,” much credit for which should go to Dr. Don P. Ayer, chief inspector at Omaha.

Dr. A. W. Clement was elected president; Sesco Stewart and W. H. Lowe were re-elected secretary and treasurer, respectively.

### D. E. Salmon

Daniel Elmer Salmon, D.V.M., was born at Mount Olive, New Jersey, July 23, 1850. He graduated with a Bachelor of Veterinary Medicine from Cornell University in 1872, and was awarded the D.V.M. in 1876 after clinical study in France. After investigating contagious diseases of animals

for the USDA, he was called to Washington to organize what became the Bureau of Animal Industry in 1884. During the 21 years he served as its chief, pleuropneumonia and several outbreaks of foot-and-mouth disease were eradicated, the federal meat inspection system was inaugurated, the mode of transmission and methods for control of Texas fever were worked out, effective quarantine regulations for imported animals were promulgated, and much progress was made upon the control of hog cholera — in spite of the roadblocks imposed by his chief antagonist, F. S. Billings.

Dr. Salmon was never overly popular in his pioneering role, and to defend the many attacks upon the BAI — mostly unwarranted — he felt forced to sacrifice much of the dignity that might have attended his important — but poorly appreciated — position. To his credit it can be said that he effectively dispelled doubts from within the veterinary profession concerning the validity of his work and that of other Bureau veterinarians — with the result that he was elected president of the USVMA in 1897. Through no fault of his own, he was in effect “thrown to the lions” in the wake of sensational, but misdirected, charges concerning the meat inspection system, and broken in spirit, Dr. Salmon was removed from office in 1905. After five years in Uruguay, he returned to the United States where he died at Butte, Montana, August 30, 1914.

Various details of Dr. Salmon’s work with the BAI are recounted elsewhere, although a full record of his achievements would require a volume in itself. While the Bureau might have been founded without him, it is doubtful that it could have functioned well — certainly not as brilliantly as it did — except for his direction during its crucial years. Except for Salmon’s vigorous and pointed defense it is more than probable that the Bureau would have been discredited by the machinations of Billings and others of his ilk over the hog cholera controversy. The same was true regarding the well-meaning but ill-

## SHARP &amp; SMITH, CHICAGO, ILL.

All Goods Warranted.

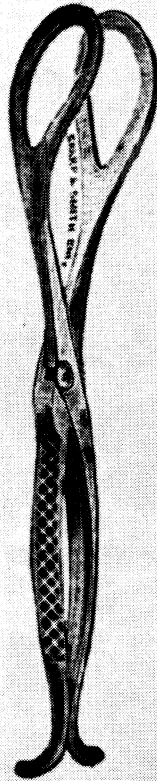


Fig. 89. Pig Forceps.

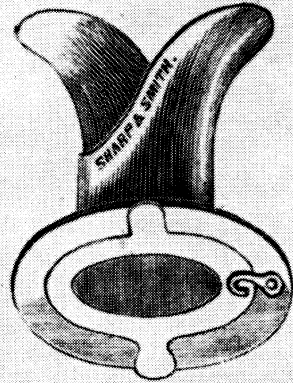


Fig. 151. Tracheotomy Tubes, Self-Retaining.



Fig. 58. Burton's Improved Drenching Bit.



Fig. 58. Simons' Mouth Speculum.

Send for Illustrated Veterinary Catalogue.

Veterinary instruments, ca. 1890. The drenching bit was a major improvement over the farrier's bottle or drenching pipe, but it was destined to be superseded by the stomach tube. *American Veterinary Review*

advised attacks on the federal meat inspection system by Olof Schwartzkopf. Obviously, Dr. Salmon did not compile the brilliant record made by the BAI in its early years by himself — although it is evident that he alone was the man who could have conceived and directed its program, and defended it from its enemies. Undoubtedly one of his chief assets was the

ability to attract and hold — at woefully inadequate salaries — the most capable coterie of investigators that could have been assembled at the time — or at any time. W. H. Hoskins characterized Dr. Salmon's life as being: "one of the most complete lives of unselfishness and true public service ever lived by any member of my chosen profession."

Perfect Molar Cutter, straight, \$10.00.

Truncator, \$10.00.

Handles to fit the above pair, \$4.50.

Dental Set, \$40.00.

Pat. May 15th, '94.

Improved Ecraseur, takes up the Slack, \$15. Farmer Miles' Ecraseur, \$16

**JACOB J. TEUFEL & BRO.,**  
**Manufacturers of Veterinary Instruments,**  
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Dental instruments and spaying ecraseur, ca. 1890. More than a few of these dental sets are still in use. *American Veterinary Review*

## 1899

At the meeting for 1899, held at the Academy of Medicine in New York City, President A. W. Clement observed:

the veterinarian may claim a close brotherhood with the practitioner in human medicine and both professions by working harmoniously can do much to advance the public health. . . . While we have to thank the practitioner of human medicine for certain new methods of treatment, which we can adapt to our use as circumstances may require, at the same time the field for original work is open for the student of veterinary medicine, and he has it in his power to do much to further our knowledge of disease not only in the lower animals but

also in man. Thus, the practitioner in human medicine can also learn from us.

After noting the recent achievements of the veterinary profession, Clement states, concerning what may be done:

We enter the realms of possibilities. . . . In all probability in the not-far-distant future we may be so far able to control and cure disease as to render the pole-axe unnecessary except from choice. . . . Is it too much to hope that tuberculosis may be cured, that rabies and tetanus may be arrested and their ravages be stopped in much the same way as has been done for diphtheria?

In delivering "A Plea for the More Gen-

eral Use of Anesthesia in Veterinary Surgery," J. P. Turner charges:

we see some veterinary surgeons still pursuing the methods of the ancients . . . and the feeling still exists, largely among the laity, that we are a hard-hearted profession.

In a more optimistic note on "The Veterinarian of the Future," N. S. Mayo asks, "who is there to-day who dare pronounce upon the progress in veterinary science that the next fifty years will bring forth?" Dr. Mayo, who lived to see the next fifty years and more (died 1958), states as his credo:

I believe that the veterinarian of the future must choose his profession from high and noble motives, not for the financial interest alone but because he shall love to alleviate the suffering and assuage the pain of those who cannot speak. I believe that the secret of success of the veterinarian of the future will lie in the education he must have. . . . The education of the veterinarian of the future should be broad, liberal and scientific.

The program included papers on tuberculosis by Leonard Pearson; dietetics by W. H. Dalrymple; glanders by M. H. Reynolds; asepsis and antisepsis by W. H. Lowe; azoturia by R. P. Lyman; milk hygiene by C. C. McLean; rabies by J. M. Parker; and acetanilid by R. R. Bell. The program of the Association of Veterinary Faculties included papers on state board examinations by A. W. Clement; practical surgery by W. L. Williams; clinical lectures by S. J. J. Harger; and the education of the veterinarian by James Law. Of some interest is the fact that of the twenty-three papers presented, ten were by past or future presidents or secretaries of the Association.

The clinical program, held at the American Horse Exchange, included a repeat of the vaginal ovariectomy by W. L. Williams, who had performed the same operation the previous year; median neurectomy by C. E. Clayton of the New York American Veterinary College; resection of the lateral cartilage for quittor by G. H. Berns; and spaying of a pregnant bitch by W. L. Williams.

Leonard Pearson was elected president of the Association; Sesco Stewart and W. H. Lowe were re-elected secretary and treasurer, respectively.

### Milk Fever

Of the papers programmed for the meeting, one — unfortunately only "read by title" — deserves special mention. This was by Olof Schwartzkopf on "The Schmidt Treatment of Parturient Paresis." The previous year, Liautard had noted in the *Review*:

Parturient apoplexy is a disease the pathology of which is about as well understood as is that of azoturia, and almost every practitioner has his own ideas as to its therapy. Not a few have settled down to a belief that severe cases die and mild cases recover.

This was in connection with Schmidt's announcement in Denmark of his discovery of udder insufflation, and serial publication of his findings in a translation by the indefatigable W. L. Williams.

In the belief that milk fever was caused by a local infection and absorption of toxins from the udder, Schmidt infused a solution of potassium iodide for its presumably antiseptic effect — which it does not possess. While he apparently did not recognize the benefits from the injection itself, particularly those "interspersed with abundant injections of air," his work laid the foundation for the first successful treatment of this mysterious malady. Unfortunately, it was some time before veterinarians appreciated the significance of Schmidt's statement (which he also failed to appreciate):

The infusion of an iodine salt in the udder, especially when accompanied with the introduction of atmospheric air, gives the promise of a quite typical result and has in a large measure brought about remarkably prompt recovery.

In subsequent volumes of the *Review* numerous reports on the Schmidt treatment appear, the results being good, bad or indifferent, apparently depending on the volume of fluid and air administered; those who made frequent return calls to

repeat the treatment enjoyed greater success. One veterinarian, who routinely made three calls at six hour intervals, reports: "What was repulsive to me once is now pleasant. . . . Usually I had to hear the same old song — 'She died last night.' Now the tune has changed."

A Michigan veterinarian, W. E. A. Wyman, in 1902, reports a particularly interesting development, the full significance of which, however, was likewise missed. Being caught without his KI on one occasion, he injected two quarts of water — rather than the liter recommended by Schmidt — and found:

This cow was up and doing well on the following morning. This opened the writer's eyes a little. The next cow also got up all right without K.I. in the injection. In fact, almost all cows with parturient paresis will get up after one to three injections of purely boiled water . . . [which] upsets the Danish theory as to the cause of the disease and the specific nature of the treatment.

Later this year the *Review* reported Schmidt's modification of his treatment in which "air is pumped through the iodide of potassium into the mammae until it becomes tense." Earlier, Schmidt had theorized that the smaller quantities of air increased the effectiveness of the iodide, and his modification indicates that he was not ready to relinquish his faith in the efficacy of the drug. Wyman, certainly, should receive some credit for discovering what Schmidt was not ready to admit. At this point it is sufficient to state that it was not long before the true role of udder distention, whether with air or water, was appreciated.

#### A. W. Clement

Albert W. Clement, first president of the newly-renamed AVMA, was born in Lawrence, Massachusetts, in 1857. He spent two years at Harvard University, and in 1879 went to McGill University where he graduated from the veterinary school in 1882. Following graduation he taught at McGill and investigated cattle diseases for the Canadian government. After two years'

study in Europe he pursued animal disease investigations at the Johns Hopkins University for six years. He was also connected with the BAI and was active in promoting the veterinary aspects of public health in Baltimore. In 1896 he was appointed State Veterinarian of Maryland, and in 1898 was elected president of the AVMA. His death in Baltimore on March 3, 1901, at the age of only 44 years, was an untimely one for the veterinary profession.

#### Animal Engineer

The meeting for 1900 was held in Detroit. In his presidential address, Leonard Pearson dealt with the status of the veterinarian and called for greater attention to: "what might be called the physiologic phases of animal husbandry." Historians have credited Dr. Pearson with the suggestion that the title of *veterinarian* be relinquished in favor of *animal engineer*. Thus in 1911, W. H. Hoskins asserted that Pearson "coined the name 'Animal Engineer,' and for the field of comparative medical science that of 'animal engineering.'" And in 1935, Merillat and Campbell bluntly claim, "The name 'animal engineer' was suggested as a substitute for 'veterinarian' by Dr. Leonard Pearson . . . in 1900."

As a sidelight on this matter, in speaking on "The Animal Engineer" in 1920, W. H. Lowe urged:

the advisability of bestowing the degree of B.S. or M.S. in animal engineering upon veterinarians who especially distinguish themselves in the study and practical application of scientific principles to the problems of animal husbandry and animal industry.

And in discussing "The Responsibility Confronting the Veterinary Profession" at the AVMA meeting in 1920, Lowe divides veterinarians into five groups: research workers and teachers, practitioners, sanitarians and official veterinarians, army men, and animal engineers:

those with superior training in the basic sciences and in animal husbandry which fits them to apply this knowledge to the improve-

ment, development and maintenance of superior livestock.

While it is true that a number of self-styled “comparative pathologists” were playing down the fact that they were veterinarians — and occasional dissatisfaction with the designation is still met with — this certainly was not the case with Dr. Pearson; in his address he used *veterinary* (profession) or *veterinarian* 48 times to twice for *animal engineer(ing)*. What Dr. Pearson said was:

With his knowledge of comparative anatomy, physiology, chemistry, foods and the predisposing and exciting causes of disease, the veterinarian should be the natural expert . . . on problems relating to all phases of animal husbandry. Before this can occur largely it will be necessary for the public to relinquish the idea that veterinarians are useful only to patch up decrepit animals or to check the spread of disease, and be educated to regard them as experts in animal husbandry — as animal engineers . . . each *veterinarian* [italics mine] should extend his knowledge and his practice, and become an expert in animal engineering.

And while Dr. Pearson recognized the need for precise studies in pathology:

If the veterinary sciences are dominated by comparative pathology, there is danger that the point of view of the veterinarian will become narrow, and that he will not be competent to apply to the best advantage the knowledge of comparative pathology that he possesses. . . . It is necessary for a veterinarian to be thoroughly familiar with animals in health before he can treat them successfully or *economically* when they are diseased.

Dr. Pearson’s perspective of the entire field of veterinary science is indicated by his endorsement of the eminent German veterinary pathologist, Theodore Kitt, for honorary membership in the AVMA.

In speaking on “The Relation of Veterinary Medicine to the Public Health,” W. H. Lowe observes:

A great work is being done by qualified veterinary practitioners all over this broad land in sanitation and preventive medicine, and it is a deplorable fact that the nature and scope

of this work is not more fully understood by otherwise intelligent people. Preventive medicine will advance as its value is recognized and demanded by the public generally. . . . It seems strange, from the standpoint of the veterinary profession, that the public is so slow in supporting and encouraging what veterinary science is capable of doing for the health and lives of the people themselves.

But with regard to pet dogs and pocket-books — animal health and wealth — veterinary medicine is “in the great majority of instances, appreciated.”

It would appear that Dr. Lowe’s request “that the relation of veterinary medicine to the public health shall be discussed as its importance demands,” did not go unheeded. M. E. Knowles reported on the transmission of sarcoptic scabies of horses to man; the subject of rabies was discussed by D. E. Salmon and by M. P. Ravenel; and tuberculosis by Austin Peters and R. R. Dinwiddie, “we do have cases of tuberculosis in the human being derived from cattle.” In determining what was or was not fit for human consumption, Tait Butler urged greater attention to: “The Relation of the Lymphatics to Meat Inspection.”

Tait Butler was elected president of the Association; Sesco Stewart and W. H. Lowe were re-elected secretary and treasurer, respectively.

### Leonard Pearson

Leonard Pearson was born in Evansville, Indiana, August 17, 1868. In 1884 he entered Cornell University and graduated with a B.S. in Agriculture in 1888. He became interested in veterinary science, and in 1887 was employed by the USDA in the pleuropneumonia eradication campaign near Chicago. He entered the School of Veterinary Medicine at the University of Pennsylvania, graduating in 1890, following which he studied in Germany for a year. On his return to America he became an Assistant Professor of the Theory and Practice of Veterinary Medicine at the University of Pennsylvania; in 1894 he was made Professor, and in 1897 Dean of

the school, which position he held until his death in 1909. In recognition of his research work, the university in 1908 conferred upon him the honorary degree of Doctor of Medicine. In his student days at Cornell he had been elected to the national honorary scientific society, Sigma Xi.

One of his major interests was tuberculosis. In 1892 he conducted the first tuberculin test in America, and in 1895 introduced the "Pennsylvania plan" of voluntary testing which gained acceptance—when compulsory plans had failed. He was a member of several important congresses on hygiene and tuberculosis, and in 1908 was chosen to preside over the section on animal tuberculosis at the International Congress in Washington, D. C.

Dr. Pearson was a prolific writer, and was one of the founders and editors of the *Veterinary Magazine*. In 1895 he organized the Pennsylvania State Live Stock Sanitary Board, and was appointed its secretary and state veterinarian, holding the latter position under a succession of governors of the state. In 1908 he diagnosed John's disease for the first time in the United States. He served as secretary of the AVMA (1894–1895) and president (1899–1900). It was in his presidential address that he suggested the veterinarian should have the qualifications of an "animal engineer"; it appears that it was his colleagues who attributed to him the suggestion that this title be substituted for "veterinarian." In his obituary in the *Review*, his biographer states that Dr. Pearson "had justly earned the proud title of the leading 'animal engineer' of America." He served as president of both the Pennsylvania and the Keystone Veterinary Associations, and was a member of the American Public Health Association, State Grange, and the Philadelphia Board of Health, among other organizations.

For two years or more Pearson's family and friends were aware of the fact that his manifold duties and responsibilities were beginning to tell upon him, and after a narrow escape from accidental gas poi-

soning, he was prevailed upon to take a vacation. He took a sea voyage to England, returning via Halifax, where an attack of hay fever caused him to go to Newfoundland. It was after he was well enough to consider returning to duty that he suffered a sudden collapse and hemorrhage, and died in a few hours at Spruce Brook, Newfoundland, September 20, 1909.

His biographer in the *Review* says of him:

He knew how to think, speak and write, was conscientious, far-sighted, honest, possessed good judgement and enjoyed the general esteem of all who knew him. He was a captivating orator, precise, methodical and clear, and possessed to a high degree the gift of analysis, synthesis and generalization. The many abstract and complex problems filtered through his mind as a pure crystal. Speaking or writing he reflected the exceptional qualities of his beautiful intellect. There was exactness and faithfulness to the rules of our language and a perfect fitness of words to express ideas in every sentence he used.

His long-time friend, AVMA President James G. Rutherford, states:

Dr. Pearson was in a class by himself among the veterinarians of this continent, while even in the Old World there are few who rank anywhere near him. He was not only a great veterinarian but a great man in many other ways, and one who, had he been spared, would have made a well-defined mark on the national life of his own as well as that of other countries.

He was only 41 years of age when he died.

In 1935, AVMA President R. S. MacKellar, Sr., said of Leonard Pearson:

He toiled for humanity, with almost a supreme contempt for worldly gain, but he lived for us, the practitioners, that we might thrive and better serve. . . . Here . . . imbued with a lofty spirit of patriotism in the truest definition of that word, was a veterinarian who thought and motivated wholly and only in terms of national ideals, in terms of national defense, in nation-building terms. . . . Here was a man who looked upon it as his solemn duty, as his sole responsibility, to make his state and his country "veterinary conscious."

## 1901

At the annual meeting in Atlantic City, President Tait Butler noted, despite urg-

ings that graduates enter research and sanitary veterinary medicine:

it still remains a fact that nine out of every ten graduates must earn their living as general veterinary practitioners, and therefore fitness for general practice is the standard by which the efficiency of college education should be judged.

And urging greater attention to "the practical business side of veterinary education," Butler was critical of teachers "who never had any experience in general, unaided, independent veterinary practice of any sort."

Concerning the work of the Association, he avers:

This is the age of specialization . . . and the time is near at hand when we must be prepared to so change the machinery of the organization to meet the requirements of modern ideas and methods. . . . Accordingly it appears to me that three sections working concurrently, one considering questions of interest to the general practitioner and including the clinics; one dealing with sanitary questions, including meat and milk inspection, and general State medicine; and one comprising investigators, experiment station workers, etc. [are needed].

M. E. Knowles noted "with extreme regret . . . the closing of the Harvard Veterinary Department . . . when so many illegitimate institutions remain open and prosper." In the same vein, L. Van Es charged:

There are colleges whose only purpose is to educate, and others which are simply commercial enterprises or which serve only to give a certain amount of prominence to their promoters. In regard to the latter class, I beg to suggest that they can do no greater service to the profession than by retiring from business.

Observing that Minnesota, Iowa, and Washington had veterinarians on their state boards of health, S. B. Nelson urged, regarding the relationships of animal and human disease:

the veterinarian by his education is the proper person to represent the state boards of health in this branch of its labors, and . . . thus, in

theory, a state board of health is not complete in its personnel without a veterinarian.

Papers on meat and milk inspection were presented by C. A. Cary and G. R. White, and on the transmission of tuberculosis through meat and milk by John J. Repp.

In a paper by "the rising young surgeon out of the West," L. A. Merrillat observed:

The gain in surgery and the lost confidence in internal medicine, so apparent in human medicine, is not yet apparent in veterinary practice, as inquiry among the veterinarians of this country brings out the confession that many practitioners never operate at all . . . and why? First, because of the difficulty of accurately diagnosing surgical diseases; and secondly, because of the lack of ingenuity displayed in securing the diseased patient. . . . The veterinarian who is a good diagnostician, and who is a mechanic in the art of securing his patients specially for each operation, is a successful surgeon regardless of his deficiencies in other directions.

Among other papers presented were those by Veranus A. Moore on disinfection, and on anthrax by W. H. Dalrymple. Tuberculosis, glanders, and Texas fever were discussed. Clinical demonstrations included neurotomy and cunean tenotomy for spavin, myo-neurotomy for crib-biting, and caudal myotomy for tail-straightening in horses.

On the somber side, the deaths of past-presidents Clement and Stickney were noted, along with that of former secretary and treasurer, Charles Burden. A member, C. D. Morris, was expelled for having written a letter to the Secretary of War which had been instrumental in securing the defeat of an Army Veterinary Bill after it had passed both houses of Congress. Morris' expulsion was later rescinded.

J. F. Winchester was elected president; SESCO Stewart, secretary; and W. H. Lowe, treasurer.

#### **Tait Butler**

Tait Butler was a native of Ontario, Canada, and graduated with honors from the Ontario Veterinary College in 1885, after which he began a general practice



Horse ambulance of the University of Pennsylvania Veterinary Hospital, ca. 1890. Some of these ambulances were real showpieces — painted fire-engine red with brass fittings. *University of Pennsylvania Bulletin*

in Davenport, Iowa. He was an organizer of the Iowa VMA and served as secretary (1888–1889) and president (1889–1890). From 1891 to 1909 he served as Professor of Veterinary Science at Mississippi, Kansas, and North Carolina successively, retiring from the latter post to become editor of the *Progressive Farmer*, in which capacity he continued until his death on January 13, 1939. In 1934 he was awarded a medal for distinguished service to agriculture by the American Farm Bureau, and his many friends in the South urged his appointment as Secretary of Agriculture in 1932.

He was but 38 years old when he was elected president of the AVMA in 1900, but it is evident that he had a broad grasp of veterinary problems; he had first come to the attention of Association members in 1886 when he won the USVMA prize essay contest.

### Age of Specialization

Perhaps related to Dr. Butler's cognizance of "the age of specialization," what would seem to have been a new development in veterinary practice was reported by the *Review* in 1897: "The first canine ambulance, in connection with a veterinary hospital, which we have heard of is that of Dr. Leavy, of New York City." Ambulances for dogs — perhaps more as conveyances for strays — had been used by the S. P. C. A. for some time, and horse ambulances had been in use for a considerable time. A "splendid horse ambulance" was offered for sale in 1897:

Elegantly ornamented with brass railing, brass lamps, etc. Painting the work of an artist. Makes a finer appearance on the street than a fire engine . . . lined with steel and the whole is built to last forever.

Commenting on canine practice at this time, R. H. Harrison, who had presented

some of the first canine cases in the *Review*, urges:

At the present time, when the price of horses is so low that an owner hesitates to call a veterinarian, on account of the expense of treatment, a surgeon can aid his reputation and pocket by skill in his treatment of dogs, and their owners. Being a lover and owner of dogs myself, I can appreciate a little sympathy for them in some one else, and a surgeon can always gain friends, and legitimate and profitable advertising by his judicious sympathy with the owner and friend of his patient.

Among the several complicated cases he presents is one of cutting the lateral rectus muscle for strabismus.

Earlier, the subject of Comparative Psychology had been investigated in the 1880's by T. Wesley Mills, M. D., Professor of Physiology in the McGill Veterinary College. Together with his students, he formed an Association for the Study of Comparative Psychology in 1885, in the belief that:

Men who had chosen comparative medicine as a career must have some real liking for those animals, at least, which are classed as domestic . . . that a knowledge of the mental constitution of animals must prove invaluable to the veterinary surgeon in the diagnosis and treatment of the diseases of his speechless patients.

### Canine Practice

It is understandable that veterinary practice was primarily horse-centered during the latter part of the nineteenth century, although this, in part, might be considered a heritage from the past, for dogs were plentiful—and some at least well cared for—and even the large cities had large dairies within the city limits. In 1883, R. H. Harrison, House Surgeon at AVC, had written:

Canine practice is rapidly becoming an important feature in the practice of veterinary medicine and surgery; and to those interested in the study it proves remunerative, and at the same time opens up a field of pathological research very interesting and instructive. Dogs in



Before it was considered unethical to display one's name on a professional vehicle, both large and small animal ambulances were in vogue — to some extent as a travelling "business card."

*Veterinary Medicine*



Canine ward, University of Pennsylvania Veterinary Hospital in 1885. Although a few schools taught small animal medicine and surgery this early, the specialty was slow to develop. Michigan State University Library

this country are more highly thought of, are better bred, and are more valuable than formerly. Especially is this the case with sporting and pet dogs.

Harrison had been running a series of reports on "Canine Pathology," in the *Review* and presents a number of highly instructive cases including: extirpation of the eye, removal of dislocated lens, tinea favosa, renal calculus, tuberculous nephritis, and several cases of rabies. The first paper on canine distemper appeared in the *Review* in 1885.

If veterinarians were slow to develop dog practice, others apparently were not. The *New York Tribune* in an item on "A Dog Home and Hospital," in 1881, states there were several of these institutions in the city. One of the largest:

contains about 300 dogs, only a small part being in the hospital wards. The keeper of the house and his wife have been in the business for thirty five years. The wife herself is a dog doctress, and gets \$3 for each of her visits.

The proprietor is quoted as saying:

People, somehow or other, will go to any

sacrifice to save a pet dog, while they seldom scruple to kill a good horse that has broken its leg or become otherwise injured. . . . I have set horses' as well as dogs' limbs in such a manner that no expert would have been able to tell the difference.

In a review of Hill's *Management and Diseases of the Dog* (1881), it is stated:

The author, in his preface, speaks very truly regarding the little attention that has been paid to the diseases of the dog. Man's best animal friend has been, and still is for the most part, at the mercy of ignorant quacks. . . . The treatise is not an exhaustive one and does not pretend to go very deeply into pathological matters. We might, indeed, criticize it on this account, but it is to be remembered that there is as yet no audience for any profoundly scientific treatise on canine diseases.

In 1884 the editors of the *Journal of Comparative Medicine and Surgery*, noting "this is a hospital era," for all sorts of human ills, urged:

We need a hospital for dogs, cats, and the small domestic animals. The amount of money in pet dogs, watch-dogs, and house-dogs in this city and suburbs is very great. Yet there is no good place where sick dogs can be well

taken care of. To be sure there are the veterinary hospitals, but they are no better than stables, and are not suitable for small and delicate dogs.

The spaying of bitches, Hill says:

is now almost unheard of, and I trust the time is not far distant when it will be discontinued on other animals. The operation is both inhuman and useless; I am thankful to say that I have never seen it performed in canine practice.

Billings, however, states:

The operation is humane and useful in that if made obligatory by law, except to breeders,

in a special license, it will tend to decrease the number of dogs, especially useless curs, and thus can lead also to a diminution of the chances of hydrophobia in man.

Apparently something of a pioneer in canine practice, Billings (1885) states that the lateral incision, as recommended by Youatt (and by Liautard in his *Animal Castration*, 1884) is senseless:

the only way to perform this operation is with ether, and by the median line. There is absolutely no danger in it; of 400 bitches of all ages, I have never lost one from the operation, and only one from the careless applica-

## DISEASES OF THE DOG INCLUDING THEIR TREATMENT.

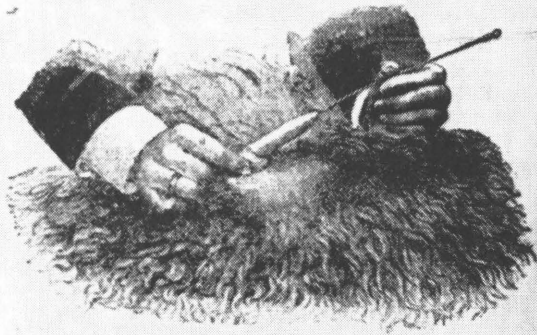
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### A FEW COMMENTS ALREADY UTTERED.

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J. M. WRIGHT, V.S., Professor of Canine Practice, McKillop Veterinary College.

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S. STEWART, Dean of Kansas City Veterinary College.

It is sold by every Veterinary, Medical and Sporting Bookseller  
in the United States, Canada and Great Britain.

W. HORACE HOSKINS, Publisher, 3452 Ludlow St., Philad'a, Pa.

Advertisement for Muller-Glass's *Diseases of the Dog* (1897), comment upon which would be superfluous—except, perhaps, that it could have been published only in a veterinary journal. *American Veterinary Review*



Otologic examination had been practiced in Germany for a considerable period before it was introduced to American veterinarians with the translation by Alexander Glass of Muller's *Diseases of the Dog* (1897). Muller-Glass

tion of chloroform by an assistant, which caused me to have recourse to ether.

## 1902

President J. F. Winchester, at the 1902 meeting in Minneapolis, recommended increasing the term for graduation to four years, and for Association membership to three years of schooling. Together with higher matriculation standards and the selection of men of broad and liberal education for the school faculties:

the results will be that in the near future all cities will have a veterinary health officer acting with the medical officers of health in controlling and preventing diseases; the public will cease to look upon the veterinarians as mere animal physicians and surgeons and will grant them the privilege of interpreting and administering laws relating to public health.

Among his recommendations was one for a "Veterinarians' Mutual Aid Society," the

function of which would be "to assist members of the veterinary profession, their widows and orphans who might prove to be deserving of professional benevolence." The matter of an insurance program had been discussed earlier in the *Review*:

It is not infrequent that in a business which is rated by the insurance people as "extra-hazardous" that a veterinarian is disabled for weeks and even months by an accident which incapacitates him for any duty; or by disease, the result of infection from a patient, or through the natural penalties of human existence; or in case such accident or disease is sufficiently severe to terminate his life, then the question of the means for immediate necessities imposes itself upon him or those whom he may leave helpless behind him.

The AVMA Group Insurance Trust, established in 1957, might be thought of as growing—after a long, latent period—out of this recommendation by President Winchester.

## Cheap Protection

Group insurance for veterinarians had been available before 1957, and professional liability insurance dates back to 1926. In 1932 it was noted that liability insurance had been available to veterinarians for six years, and during that time 56 suits had been brought against the 220 practitioners holding this insurance. Nine cases went to trial, and in two instances verdicts were returned against the defendants. Noting "the amount of damages claimed or sued for has been quite large in some instances," the *Journal* editor suggests:

It is not our intention to frighten veterinarians unnecessarily, but the figures speak for themselves. The number of members who have found it necessary to fall back upon their liability insurance for protection against actions started against them is larger than anyone expected when this form of insurance policy was first written. . . . Considering that the insurance costs less than five cents a day, it would appear to be a rather cheap form of protection.

In 1903, Wm. Dougherty had presented a plan for a "Mutual Benefit Society for

Veterinarians . . . to afford pecuniary aid to sick or injured members, and also aid to their widows and orphans or legal heirs." Sick benefits of \$15 per week for up to eight weeks were to be taken from a fund supported by annual assessments of \$6 per member, or "extra assessments . . . when necessary." A death benefit fund was to be supported by an initial assessment of \$1.00 plus ten cents per year for each year over age 25. Each time a member died, the entire membership was to be assessed at the initial rate, and "A sum of money equal to one assessment call of the entire membership, less 15%, shall be paid to the heirs." After considerable discussion, it was decided to poll the entire membership (some 470) in writing. At the following meeting Dr. Dougherty reported having discussed the matter with W. H. Hoskins:

He has grave doubts as to the success of the assessment plan. After giving it a close study, I have personally come to the conclusion that the assessment plan is not practicable.

On the matter of insurance of another sort, in 1898 a Veterinary Service Association was incorporated in New York City "to furnish medical attendance to horses and cattle by competent and licensed veterinary surgeons," under the supervision of Mark L. Frey, a graduate veterinarian. For a registration fee of fifty cents plus fifteen cents a week per animal, unlimited medical attendance was to be provided by a corps of veterinarians located throughout the city. For this service the veterinarian was to receive two dollars an animal per year; surgery would be performed on the usual practitioner-client basis.

Noting that the scheme had a decidedly unethical taint, and that the only veterinarians who could be induced to fall for it would be those who had no practice, the editors of the *Review* ask:

How can a man be such an ass as to give his clients into the hands of such a concern, allowing them to collect the money for his work and paying him wages, as the mill owner does his laborers.

### Straight and Narrow

Returning to the meeting (1902), in a paper on "The Legitimate Field of the A.V.M.A.," Roscoe R. Bell noted the opposition of the Pennsylvania VMA to the clinics and "discussions of questions of purely local and narrow interest" at the AVMA meetings, the contention being that these were outside the scope of the AVMA. W. Horace Hoskins had urged elimination of both the clinics and of clinical papers from AVMA programs, with the substitution of "broader association work along truly national lines."

As Dr. Bell points out, this would leave little more than "the reading and discussion of papers on state medicine and national legislation." Also, this would require expunging of Article II of the Constitution:

The purpose and object of the association are to contribute to the diffusion of true science, and particularly the knowledge of veterinary medicine and surgery.

Not only would this be "a grievous wrong to the great body of practitioners," Dr. Bell contends, but:

it is an impertinence beyond parallel and a presumption without precedence for a number of members so short of a majority to suggest that the sections of the program which interest the majority shall be totally eliminated.

As a matter of passing interest, C. J. Marshall had reported some 1,700 registered veterinary practitioners in Pennsylvania at this time, but "about 1,000 names on our registration list were placed there improperly." Fewer than 300 were graduate veterinarians; about 200 belonged to the state association, and 27 to the AVMA.

The deaths of John Faust, the last non-graduate to be admitted (1884); R. J. Saunders, one of the founders; and past-president R. S. Huidekoper were noted. SESCO Stewart, secretary for seven years, was elected president; John J. Repp was elected secretary, and W. H. Lowe re-elected treasurer.

## THE ASSOCIATION IN CANADA

The fortieth annual meeting of the AVMA was held in Ottawa, Ontario, in 1903, the first meeting of the Association on Canadian soil. "This," Sesco Stewart claimed in his presidential address, "should remove any doubts which Canadian veterinarians may have entertained as to the breadth of purpose of this organization."

That A. W. Clement, in his presidential address in 1899 had perhaps envisioned a broader scope of the newly-renamed Association than was intended is suggested by his concept of its "embracing in its field the United States, Canada and Mexico, nay, even more, the whole Pan-American Continent." While there is considerable latitude in the connotation of "American," it is evident that this broad concept of the interrelationship of the veterinary professions of the Western Hemisphere did not become a reality until the establishment of the Pan-American Congress of Veterinary Medicine in 1951. *De facto* recognition of Canada as a full partner, however, was long overdue. The following year (1900) six Canadians were elected to membership — more than were members at the time — and Fred Torrance of Winnipeg was elected a vice president of the Association; in 1917 he was elected president. Of the 48 new members in 1900, 18 were from the Ontario and McGill schools. In 1908, J. G. Rutherford, Veterinary Director General for the Dominion, was elected president of the AVMA, and in 1911 the provinces of Ontario, Manitoba, and British Columbia each had more AVMA members than had 20 of the states.

On the subject of education, Dr. Stewart notes that as a result of the AVMA's raising its standards for membership:

A number of veterinary colleges raised their standard so that graduates would be eligible to membership, and this achieved a great gain for our profession. In 1897 the United States Bureau of Animal Industry established a like standard for eligibility to enter the veterinary service in the Department of Agriculture. So potent was the combined influence of these

two regulations that practically all of the veterinary colleges of the continent have announced the three-year standard.

The "sensation of the meeting" was D. E. Salmon's paper on "Bovine and Human Tuberculosis," in which the results of Bureau efforts to disprove Koch's contention that tuberculosis was nontransmissible between cattle and man were given:

The effect of Dr. Salmon's paper was electrical; every one seemed to realize that they had been particularly fortunate in being present to listen to the reading of a paper that effectually settled an important question of world-wide interest; that a new chapter in the history of medicine had been completed; that an international bomb had been exploded; and that they had been present when the lucifer was applied. . . . Cheer after cheer leaped from the throats of the guests, and the essayist was applauded to the echo. . . . There was no discussion — just praise.

As a matter of some interest, Salmon's paper was part of the program which was conducted in the magnificent barn on the farm of the Hon. W. C. Edwards, who spoke on the Bang system for eradication of tuberculosis that he had been pursuing on his farm. The Hon. Sidney Fisher, Minister of Agriculture for Canada, extolled "the importance of veterinary science to agriculture," and J. G. Rutherford, Chief Veterinary Inspector for the Dominion, spoke on glanders. Together with papers by J. Desmond, government veterinarian of South Australia, on tumors in domestic animals; and epizootic aphtha by Prof. Edoardo Perroncito of Italy (read by title), the meeting took on a distinctly international aspect. Also presented were papers on avian tuberculosis, by V. A. Moore and A. R. Ward; bovine tuberculosis, by J. J. Repp; cardiovascular drugs, by P. A. Fish; and meat and milk inspection, by M. E. Knowles.

Roscoe R. Bell was elected president; J. J. Repp and W. H. Lowe were re-elected secretary and treasurer respectively.

### Sesco Stewart

Sesco Stewart, D.V.M., was born in Ontario, March 23, 1855, but moved to the

United States while quite young, and considered Pennsylvania as his home state. In 1878 he obtained the M.D. degree from Wooster University and entered medical practice in Iowa. In 1885 he graduated from Iowa State in the same class with G. H. Glover, later dean at Colorado and AVMA president, and W. B. Niles, co-discoverer of hog cholera serum. Dr. Stewart engaged in veterinary practice until 1892 when he entered meat inspection at Kansas City. Here he became interested in the Kansas City Veterinary College, and was the moving spirit in its reorganization in 1895, becoming its president in that year. A year later he became secretary-treasurer of the college, which position he held until his death on February 7, 1918, at which time he was also dean of the faculty.

Dr. Stewart was president of the Iowa VMA in 1886 and secretary, 1887–1892. He was a charter member of the Missouri Valley Veterinary Association and twice served as its president. He served as secretary of the AVMA, 1895–1902, and was elected president, 1902–1903. Upon his death, W. H. Hoskins said of him, "He seemed to have died too soon. His work was not finished."

## 1904

The annual meeting for 1904 was held in St. Louis at the time of the World's Exposition. In his presidential address, Roscoe R. Bell noted that the prosperity being experienced by the veterinary profession was not due to "boom times," but to:

the quality of the practitioner himself, which has inspired the owner of livestock with greater confidence in his ability to render valuable services, not only in the treatment of the diseases from which animals suffer, but the advice of the veterinarian of the modern school is sought upon questions of sanitation, particularly for the eradication and prevention of those animal scourges which destroy the herds and flocks of livestock breeders and owners.

In taking up the perennial subject of veterinary education, Dr. Bell suggests that perhaps the recently de-activated Associa-

tion of Veterinary Faculties was a more logical agency than the AVMA to be concerned with details of "censorship over the schools of the country . . . to see to it that they live up to the statements in their announcements."

In a provocative discussion on "When to Operate," L. A. Merillat notes the dearth of so-called "popular papers" presented at the meetings, and observes:

The capable writer finding it distasteful to present a paper here that does not compare favorably, from a scientific standpoint, with those which delve deeply into the realms of mystery and are adorned throughout with high-sounding technical terms, leaves the task alone and comes to the meetings year after year to hear only the year's revelations of the field and laboratory. He goes home proud enough of the progress of his profession, but without additional knowledge as to his daily vocation.

Dr. Merillat concludes his lengthy argument with a condemnation of the AVMA clinics as being:

not a fair presentation of the highest standard of American veterinary surgery . . . they should be abandoned or conducted on entirely different lines. . . . The member of this Association who is incapable of performing this or that operation will add nothing to his deficiency by occupying a seat at these exercises. They excite the greatest curiosity, but they do not instruct the unlearned.

At the clinical session, 14 cases were presented (none by Dr. Merillat); of these, one at least should have been exempted from Merillat's wrath—a demonstration of the passing of the stomach tube by G. R. White. This was something which undoubtedly most of those present had not seen done; the reporter, E. M. Ranck, states, "There is no reason to believe that it will not soon come into universal use by veterinary practitioners." But considering the facilities for a crowd of perhaps 200, some doubt may be cast upon the educational value of certain other demonstrations. These included quittor operation (40 minutes); two standing castrations (15 seconds and 8 seconds); roaring operation (30 minutes); vaginal ovariectomy; intestinal anastomosis (dog); and 6 lame horses

which were diagnosed and prescribed for. Yet, "It was generally conceded that this was altogether the most satisfactory clinic held."

It is perhaps not too invidious to note that at the 1906 clinic there were no less than 6 roaring operations and 2 quitters. As in previous years, this also was "the best clinic that had yet been staged," and perhaps it was, but it might be doubted that six roaring operations could be considered as more than an opportunity for six men to prove their prowess — with little opportunity for its being proved otherwise. And while "practical" papers had been, and continued to be, presented, surgeons had to be contented with mostly other than surgical papers until the meetings were sectioned beginning in 1910.

M. E. Knowles was elected president; J. J. Repp and W. H. Lowe were re-elected secretary and treasurer, respectively.

### R. R. Bell

Roscoe R. Bell, D.V.S., was born in Virginia, August 16, 1858. After graduating from Norwood College he became a staff member of the *Spirit of the Times* (New York) until he entered the American Veterinary College, from which he graduated with honors in 1887. The following year he became Professor of Materia Medica at A.V.C., retaining this position until failing health forced him to relinquish it in 1907. He died of Bright's disease on February 8, 1908.

In 1896 Dr. Bell purchased an interest in the *American Veterinary Review* and became one of its editors, and sole editor — and presumably proprietor — upon Dr. Liautard's return to France in 1900. Merillat and Campbell note upon Dr. Bell's assumption of the junior editorship of the *Review*, "there was immediate improvement in the publication. He supplied a technique and finesse that the senior editor did not possess." The local, state, and national veterinary associations each honored Dr. Bell with their highest office; he was elected AVMA president in 1903.

### 1905

At the 1905 meeting in Cleveland, President M. E. Knowles noted:

The usefulness of the veterinarian is increasing rapidly as the lay public more fully recognize the value of the educated veterinarian's services, not merely as a practitioner alleviating the suffering of our domestic animals, but in the still higher sphere of the sanitarian. . . . While his mission as a practitioner is a most noble one, the part he plays in preserving human life is far more important.

And congratulating Pennsylvania for having made Leonard Pearson a member of the state board of health, Knowles urged, "It is largely within our power to see to it that every State in the Union has upon its board of health a capable veterinarian."

Both the papers and the clinic would appear to have been more to the liking of Dr. Merillat; papers were presented by W. L. Williams on spavin, R. C. Moore on neurectomy, M. H. Reynolds on stable ventilation, and L. A. Klein on scours. The clinic was described as:

very near to being a perfect one: in fact, so near, that we heard a prominent opponent of this section of the annual meeting's programme acknowledge that he was mistaken; that properly conducted he believed they were a valuable addition, educational and interesting.

An evening session included a paper by Dr. Merillat on "Accidents and sequellae of Surgical Operations," which required an hour of rapid reading, during which:

Not a sound could be heard save the author's voice, so intent were his auditors to catch every word, and when he had concluded there ensued a discussion which has probably never been equalled in this country.

Other papers were presented by Leonard Pearson on immunization of cattle against tuberculosis; S. H. Burnett and Jacob Traum on blood examination in the dog; J. R. Mohler on cultivation of trypanosomes; and by E. L. Quitman on the U.S. Pharmacopoeia. In a paper on "The Profession and the Advancement of Science," D. A. Hughes inquired:

Is the eagerness to receive knowledge on the part of our membership commensurate with the eagerness to give knowledge? . . . Our books are in sharp contrast with the great modern books on human medicine . . . [and] many of the articles on veterinary topics . . . are commonly very faulty. . . . They are apt to be either a mouthing of old material or repetition of the commonest things in text-books. . . . We do not prize enough the opportunities we have to perform post-mortem examinations . . . pathological material is, through carelessness or indifference, constantly being thrown away and the knowledge lost to science. . . . Not until men of the requisite capacity bestir themselves will there be produced bodies of scientific papers equal in scientific import and content to papers on similar subjects in human medicine.

In accordance with the 1904 revision of the bylaws, the Honor Roll of members for 25 consecutive years was established with three men qualifying: William Dougherty of Baltimore, and past-presidents John F. Winchester of Massachusetts and James L. Robertson of New York. The death of past-president William B. E. Miller was noted. William Herbert Lowe was elected president, with George R. White of Tennessee being elected treasurer to fill the post vacated by Dr. Lowe, John J. Repp was re-elected secretary.

The clinic included several operations for spavin, stringhalt, lameness, roaring, quittor, and tendonitis in horses by L. A. Merillat, W. H. Hoskins, J. W. Adams, M. H. McKillip, W. L. Williams, and others. Chloroform anesthesia was demonstrated by Dr. Merillat, and passing of the Phillips stomach tube by G. R. White and J. M. Phillips. A diagnosis of rheumatism in a dog was made by R. R. Bell, and R. P. Lyman demonstrated flank and vaginal ovariectomy on a cow.

### M. E. Knowles

Morton Edmund Knowles, D.V.S., was born at Clinton, Iowa, on April 24, 1862. After graduating from De Pauw University, he entered the American Veterinary College and graduated in 1884. He was State Veterinarian of Indiana, 1886–1892, and

of Montana from 1892 to 1913. Commissioned a second lieutenant in the Veterinary Corps in 1917, he rose to the rank of major, and served as Chief Veterinarian on the staff of General Pershing. Merillat and Campbell state, "but for the efficiency of Major Knowles at the evacuation stations . . . the operation of the Veterinary Corps . . . would have broken down completely."

Dr. Knowles joined the Association in 1891, was a vice president 1900–1904, and was elected president in 1904. He also served as president of the Montana VMA, and as state veterinarian is credited with providing his adopted state with "a splendid system of animal disease control, under conditions that made such work extremely difficult, and at times most discouraging." He died June 16, 1923.

### The Stomach Tube

As with other questions involving priority there is an aura of uncertainty concerning use of the stomach tube in America.

Although the stomach tube apparently had been known to the veterinarians of ancient India, it was forgotten for centuries until the celebrated British anatomist, Alexander Monro, *secundus*, mentioned it in his lectures, dating at least to 1779. A communication by Monro, appearing in Rowlin's *Complete Cow-Doctor* (1799), occasioned widespread use of the tube for a number of years for bloat, but this also seems to have been largely forgotten. In 1847, Edward Mayhew, lately of the London school, discovered the expedient of passing a tube via the nostril of the horse, and although his discovery was published, it was largely disregarded for half a century.

Probably the first mention of the stomach tube in the veterinary literature of America is to be found in several of the numerous editions of William Youatt's books published here beginning in the 1830's. Although Monro had suggested the tube as a convenient means for administering medicines, for many years it was advocated almost solely for relief of bloat in



The probang—sometimes in the form of a stiff rope—was used for relieving choke throughout most of the nineteenth century; although the stomach tube was known, it was little used until well into the twentieth century. Clater-Armatage: *Cattle Doctor*

cattle, and for administration of nutritive gruel in tetanus in the horse.

The first article in the *American Veterinary Review* on the use of the stomach tube did not appear until 1904. In this, J. M. Phillips states that he had conceived the idea of using the tube for a variety of conditions from having recalled seeing as a boy, a cut in a book showing the tube used in tetanus in the horse. However, he did not act upon his idea until:

In 1895 I heard of Dr. H. B. Piatt's having employed a tube in cases of stomach derangement with success. . . . I purchased a tube similar to his, and used it . . . in my practice whenever it was indicated. . . . I can assure the profession that it is one of the most practical operations in veterinary surgery. . . . The use of the tube is indicated in acute indigestion, engorgement of the stomach, gastritis following acute indigestion, toxic gastritis and ordinary chokes.

He states that while taking a postgraduate course at the Chicago Veterinary College in 1903, he met practitioners from nearly every veterinary college in the United States and Canada: "I learned from them that none had practiced this operation, and none of their *alma maters* had taught any form of siphoning the stomach of the horse."

Phillips put his modification of Piatt's tube on the market, and in 1905 F. J. Bliss

stated that he had exhibited a Phillips Stomach Tube at the 1903 AVMA meeting, but:

I recollect it did not appeal very strongly to those present, and was commented on, if at all, adversely. . . . I want to be understood as claiming that more can be done in five minutes to relieve a case of colic than you can do with the whole gamut of remedies that we have been using for the past fifty years.

An indication of the amount of interest stirred up by Bliss's demonstration may be gathered from the fact that no mention was made of it in a lengthy report of the meeting as published in the *Review*. Later in 1905, however, the "Publishers' Department" of the *Review*, which regularly called attention to the products of advertisers, states: "Dr. Phillip's Stomach Tube is endorsed by veterinarians everywhere."

In 1906 the *Review* notes:

Dr. D. O. Knisely, of Topeka, Kansas, is the inventor of a new design of stomach tube for use in the horse. It differs from other tubes in being double to permit the injection of fluid through a lesser and thinner walled compartment, and thereby thin the stomach contents that it may flow more freely out through the larger, and more rigid walled compartment.

At the time of Knisely's death in 1917, it was stated that he was best known among veterinarians for his advocacy of the use of the stomach tube. But:

Dr. Knisely was not the first to use the stomach tube on animals. That distinction probably rests with Dr. E. L. Quitman of Chicago, who first used this contrivance for the relief of gastric flatulence more than twenty-five years ago, but to Dr. Knisely is due the credit for popularizing the stomach tube. . . . He designed the one that bears his name—a double current tube, that permits a simultaneous inflow and outflow and is widely used in this country. . . . There are now few practitioners who do not possess one.

Later, in response to a question on the matter, D. M. Campbell notes that Alexander Monro, the Edinburgh anatomist, should receive credit for introduction of the tube, and that Quitman was the first man in America to use it—but only briefly

about 1892. However, George Dadd advertised a stomach tube for \$5.00 in 1859, and Leonard Pearson mentioned its use in the USDA publication on *Diseases of Cattle* in 1892. Dr. Campbell correctly notes, however, "For some time . . . Dr. Knisely was the leader and almost the only exponent of the use of the stomach tube. . . . In this advocacy he was early joined by L. A. Merillat."

In 1934, J. M. Hurd notes: "The use of the stomach tube in veterinary medicine is essentially an art of American veterinarians," and while "leading practitioners everywhere use the stomach tube daily," he feels that many still do not realize its full value. In particular, he suggests, "its use also tends to minimize doctoring by the owner, as few laymen will attempt to pass a stomach tube."

Regarding another technic which had not yet gained universal acclaim, in 1904 W. F. Sykes notes that the prejudice against intravenous medication *undoubtedly* stemmed from its association with blood transfusion and the unsatisfactory experiences many physicians had had with the latter technic generations ago. He mentions that intravenous injections had been employed as far back as the eighteenth century, but that frequent infection, and the ungrounded fear of admitting air into the veins, had served as powerful deterrents to its widespread use. In giving the technic in detail, Sykes states, "The opportunities for intravenous injections will become more numerous the less they are feared and the better they are known."

On the subject of "Immunization and its Practical Application," L. Van Es writes in 1904:

While processes of immunization are coming more and more into use in medicine, they have nowhere reached a higher degree of usefulness, or are employed more extensively and successfully than by the veterinary branch of the profession.

As a matter of considerable interest, he offers a warning, the full implications of which have, perhaps, recently only been fully appreciated:

Immunization by the inoculation with an active virus, perhaps, will never be seriously considered in practice as it is not free from danger and is always accompanied by a certain element of risk.

## 1906

In his presidential address at the 1906 meeting in New Haven, Connecticut, W. H. Lowe expressed regret over the resignation of D. E. Salmon as Chief of the BAI, but delight that A. D. Melvin had been appointed in his place. Earlier, the Executive Committee of the AVMA had nominated Leonard Pearson as its first choice after Secretary of Agriculture Wilson had asked for "an expression from this association as to the qualifications of the man to be appointed." A resolution was adopted giving "full and hearty" endorsement to Dr. Melvin, as was one commending the BAI upon its being found blameless in the alleged meat inspection scandal which had forced the resignation of Dr. Salmon.

Contrary to those apostles of doom who, having viewed the bicycle as the agent of extinction of the veterinarian a decade or so earlier, now eyed the automobile with the same misgivings, Dr. Lowe avers:

The future of the veterinary profession does not depend upon "the coming of the automobile" or "the passing of the horse," but it does depend, and always will depend, upon the ability, adaptability, character and purpose of the young man who knocks at the college door for matriculation.

Among his recommendations was one that a category of "Fellow of the AVMA" be created to honor those:

who have rendered some conspicuous service for the benefit and advancement of veterinary science and art, and who have been recommended for such conspicuous service by a majority of the living past presidents of the A.V.M.A.

This was occasioned by the recent adoption of an Honor Roll for twenty-five-year members, Lowe contending: "I would have had the condition of enrollment on the

Honor Roll *achievement* rather than the length of membership. . . . It is the men who do things that should be honored." Little fault, however, could be found with the first Honor Roll members: this year the name of W. Horace Hoskins was added to those of past-presidents Winchester and Robertson, and Wm. Dougherty, who had labored on behalf of Army legislation.

Following the adoption of a motion the previous year by C. J. Marshall, a nominating committee consisting of the past-presidents (Bell, Butler, Hoskins, Robertson, Stewart, and Winchester) presented a slate of candidates, with three names for president and two for each of the other offices. In many of the preceding years there had been "no contest" for most of the offices. James Law was elected president; R. P. Lyman, secretary; and George R. White, treasurer.

Papers were presented on glanders by V. A. Moore, Ward Giltner, J. G. Rutherford, G. H. Berns, and Cassius Way. Other topics included roaring, by W. L. Williams; insect pests, by W. H. Dalrymple; tick eradication, by Tait Butler; mange, by A. T. Peters; arecoline, by P. A. Fish; and the Army Veterinary Service, by C. H. Jewell.

At "the ideal clinic which we have all been hoping for," 25 horses and one dog were operated on, with W. L. Williams, L. A. Merillat and G. R. White dominating the field. The proceedings were interrupted by a humane society officer who claimed:

he had been informed that unnecessary operations were being performed, or that animals were being caused to suffer pain simply to demonstrate surgical methods . . . but when shown what was being done he changed his mind, and remained to witness many of the procedures.

## 1907

Attendance at the Kansas City meeting in 1907, nearly 800, was almost twice that of any previous meeting, but only 180 of these were members (total membership, 734). There had been 175 members (of

592) present at the meeting in St. Louis in 1904, and more than 200 nonmember veterinarians from Missouri and Kansas were at the Kansas City meeting.

Speaking on "Old and New Science," president James Law notes:

Miserable failures constantly follow the lack of the new scientific knowledge. . . . On the other hand our modern, improved, laboratory methods of diagnosis have been allowed to crowd out the older approved systems, and to leave a case in doubt which could have been quickly and accurately determined by such older methods. . . . [However] I stand for the new diagnosis quite as strongly as I do for the old . . . each is essential in its own proper place . . . both should be availed of when circumstances permit.

The "burning question" of veterinary education, Dr. Law avers:

cannot be settled until we advance the requirements for admission to the profession approximately to those exacted in the sister profession of human medicine. . . . The increasing demands exacted of aspirants to public veterinary service mark an epoch in which veterinary education must respond to such demands, or be relegated to neglect. . . . The veterinarian is the only logical or safe officer to be charged with the control of animal diseases that are dangerous to man, yet, if the public is to entrust him with this duty, it must be first assured that the veterinarian in question is equally accomplished in all that pertains to these diseases in the lower animals as the physician is in regard to the same affections as seen in man. . . . Stagnation in the veterinary profession means death.

Continuing Dr. Law's theme, W. L. Williams, in speaking before the recently reactivated Association of Veterinary Faculties, called for more and better preparatory education of veterinary students, stressing:

the needs for efficiently studying veterinary science and the recognition of the veterinarian as an educated gentleman. . . . Invasion of fields logically belonging to the veterinarian are now and then threatened by the agriculturalist because of his higher and better education, consisting of four years each of high school and college or university work. . . . The veterinary service in America is everywhere defective and fragmentary. . . . There

is scarcely an area which would not to-day afford abundant room for the addition of an equal number of veterinarians. . . . But the men for this task must be of a higher type than those now existing and must be prepared to take up the work now left undone by existing veterinarians.

As chairman of the Committee on Intelligence and Education, Leonard Pearson called attention to the fact that veterinary education was deficient in such areas as milk, meat, and dairy inspection, nutrition, animal disease research, and animal husbandry:

In the long run, veterinarians will find themselves occupying the fields that they are better fitted to occupy than are men trained in other lines and in other schools. . . . So long as men must go to institutions other than veterinary colleges to obtain the best attainable training in many of the fundamental subjects that enter into the veterinary sciences, the veterinary profession cannot be said to have a very secure hold on its field, and it cannot advance as it should.

Among papers presented were those on tuberculosis by A. D. Melvin, J. F. Winchester, and J. R. Mohler; milk inspection by C. A. Cary and Ward Giltner; infectious ulceration in sheep by M. E. Knowles; and the perennial subject of roaring by W. L. Williams.

W. H. Dalrymple was elected president; R. P. Lyman and G. R. White were re-elected secretary and treasurer, respectively.

The Honor Roll of twenty-five-year members, established in 1905, was enlarged to include past members who would have qualified earlier. These were the founders: Charles Burden, O. H. Flagg, Alexandre Liautard, Isaiah Michener, J. Penniman, Josiah H. Stickney, Elisha F. Thayer, and Robert Wood. Others, with dates of election, were: James L. Robertson (1868); R. J. Saunders (1871); T. K. Very (1872); J. D. Hopkins (1873); Wm. Dougherty (1874); C. P. Lyman, J. C. Meyers (1875); Benjamin McInnes, C. W. Crowley (1876); W. J. Coates (1877); J. F. Winchester, W. H. Wray (1878); D. J. Dixon, R. H. Harrison, F. H. Osgood (1881); W.

Horace Hoskins, L. H. Howard, F. W. McLellan, and W. A. Sherman (1882). Nine of the twenty-seven men were deceased; only one of the founders, A. Liautard, was still living — in France since 1900. This left James Robertson, with forty years of service, the senior active member of the Association, along with Drs. Hoskins, Dougherty, and Winchester as active members of the "official family."

### James Law

James Law, F.R.C.V.S., was born in Scotland, February 13, 1838, and entered the Edinburgh Veterinary College at 16, graduating in 1857. He became Demonstrator of Anatomy at his alma mater, and co-authored a text on anatomy with his preceptor, John Gamgee. Later he was Professor of Anatomy at Gamgee's ill-fated college in London. In 1868 he was picked by Andrew White, president of Cornell University, to be Professor of Veterinary Science in the newly established institution, in which capacity (from 1896 as dean of the New York State Veterinary College) he was to serve for 40 years, until his retirement in 1908.

His many accomplishments include his monumental five-volume work on *Veterinary Medicine*, published about the turn of the century, and countless articles in the veterinary and agricultural publications over many years. As a leading authority on epizootic disease, he was a member of the Treasury Cattle Commission, and was a special investigator for the BAI. He was a leading proponent of higher standards for veterinary education, a position not incompatible with his *Farmers' Veterinary Advisor* or his veterinary editorial departments in the *New York Tribune* and the *Livestock Journal*.

It was in recognition of his manifold contributions to veterinary medicine, rather than as a long-time Association worker, that he was accorded the presidency of the AVMA in 1906. His death on May 10, 1921, terminated one of the longest and most distinguished careers of service to veterinary medicine in America and evoked the

following tribute from his successor, Veranus A. Moore:

Dr. Law was an inspiring and thorough teacher. In his earlier years at Cornell he was not only a teacher of unusual distinction but also the leading comparative anatomist and pathologist; the most skilled in veterinary surgery; the keenest in physical diagnosis; and the most scientific and successful livestock sanitarian in America. It was at his feet that Daniel Elmer Salmon and Leonard Pearson received their inspiration for the valuable work they accomplished. Occasionally in those earlier years, with a prophetic vision, he would refer to the coming of veterinary colleges that would be worthy of the cause they were to serve. . . . And now the mantle of this great scholar and teacher has fallen on the veterinary educators of the land. No one of them is capable of wearing it alone.

### 1908

In his presidential address at the meeting in Philadelphia in 1908, W. H. Dalrymple called attention to the fact that the American Medical Association was urging "rational reciprocity" based upon uniform standards of education and legislation among the states, and observes:

The trend of professional opinion, both medical and veterinary medical, I think, seems evidently to be in this direction of reciprocity among the states; and which, I believe is a prospective condition, concerning our profession, worthy of the best thought of this association. If I mistake not, one of the first steps in the accomplishment of this end, would be uniformity in the educational requirements, both for matriculation and graduation, in the different veterinary institutions throughout the country.

The report of the Committee on Education, read by Leonard Pearson, evoked much discussion. It dealt mainly with criticisms of the report issued by the USDA, which recommended certain minimum standards for matriculation and graduation—modified from a similar report made by the committee, but which had failed to obtain the approval of the Association. The USDA report, based on visits of a committee to the schools, listed eleven of the nineteen schools as Class A, i.e., meeting their recommendations; four Class

B, whose graduates were no longer to be recommended as eligible to take the Civil Service examination; and four Class C, new schools which did not yet have any graduates. While it was recognized that some action had to be taken with regard to some of the schools with lesser requirements, the committee objected to the rigid curricular requirements and educational standards for teachers imposed upon the schools:

This recommendation shows complete disregard for sound principles of teaching. . . . To say that a professor of anatomy must give at least 200 lectures and 300 hours of laboratory work is to interfere with a detail of pedagogy with regard to which the Secretary of Agriculture *has positively no right* to interfere. . . . Anatomy is a subject difficult to teach by lectures.

In rebuttal, Tait Butler, a member of the USDA committee, was of the opinion:

the Committee was as competent to say how anatomy should be taught as Dr. Pearson is to judge of the competency of the Committee. . . . If it is within the province of the Secretary of Agriculture to say that anatomy shall be taught his employees, then it is within his province to say how it shall be taught and how much shall be taught.

In speaking on "The Important Relation of the Veterinarian to Public Health," Fred J. Mayer, M.D., noted, "This newly recognized responsibility raises the veterinarian to full fellowship with his medical brother," and urged the AVMA to:

take the initiative in establishing a postgraduate school or Institute of Comparative Medicine . . . where medical men and veterinarians may take a course which neither should neglect.

Tuberculosis was discussed by V. A. Moore, J. R. Mohler, O. E. Dyson, H. J. Milks, and Burton Rogers, and members were urged to participate in the International Congress on Tuberculosis to be convened shortly in Washington, D.C., and of which Leonard Pearson was chairman of the section on tuberculosis in animals. Among other papers presented were those

on hog cholera immunization by A. D. Melvin; livestock transportation by N. S. Mayo, and shipping fever by C. H. Jewell; opsonic therapy by R. A. Archibald; and veterinary history by D. Arthur Hughes.

By unanimous consent it was resolved that the AVMA:

extend the privilege of membership to veterinarians of the new world, and that veterinary associations in other countries of North, Central and South America be invited to send representatives to our annual meetings.

John G. Rutherford of Canada was elected president; R. P. Lyman and G. R. White were re-elected secretary and treasurer, respectively.

### W. H. Dalrymple

William Haddock Dalrymple, M.R.C.V.S., was born in Scotland, April 23, 1856, and was educated at Glasgow. In the 1890's he became Professor of Veterinary Science at Louisiana State University, where through his work and writings he became known as the "father of veterinary medicine" in the deep South. In 1915 it was said of him:

Indeed the name Dalrymple in Louisiana and adjacent states has signified a new attitude of the professional men towards the public. He early grasped . . . the lofty principle that the highest form of medical practice consists in disease prevention, and that it is the duty of the public health officer to sacrifice monetary advantage to that end.

A Fellow of the American Association for the Advancement of Science, and of the American Medical Association, Dr. Dalrymple was long a stalwart of the AVMA and was elected to its highest office in 1907. Upon his death on July 17, 1925, the governor of Louisiana stated, "The state and nation has indeed suffered a great loss."

### 1909

In his presidential address at the 1909 meeting in Chicago, J. G. Rutherford expressed his regrets:

that the influence of this association was not earlier brought to bear on the profession in

Canada. . . . The conditions under which the practice of comparative medicine is carried on are practically identical in both countries, and nothing but good can result from the maintenance of the most friendly relations between members of our profession on both sides of the international boundary. . . . In both countries we are slowly gaining ground in the control and eradication of animal diseases, and, as a consequence, are year by year improving our position with the general public and even with the live stock men themselves, who, in the very nature of things, are the last to be convinced of the benefits which they are the first to derive from our efforts. . . . [ But ] we are still a long way from being in the position of Alexander the Great, who wept because he had not more worlds to conquer.

Concerning "the vanishing art of diagnosis," Dr. Rutherford observes:

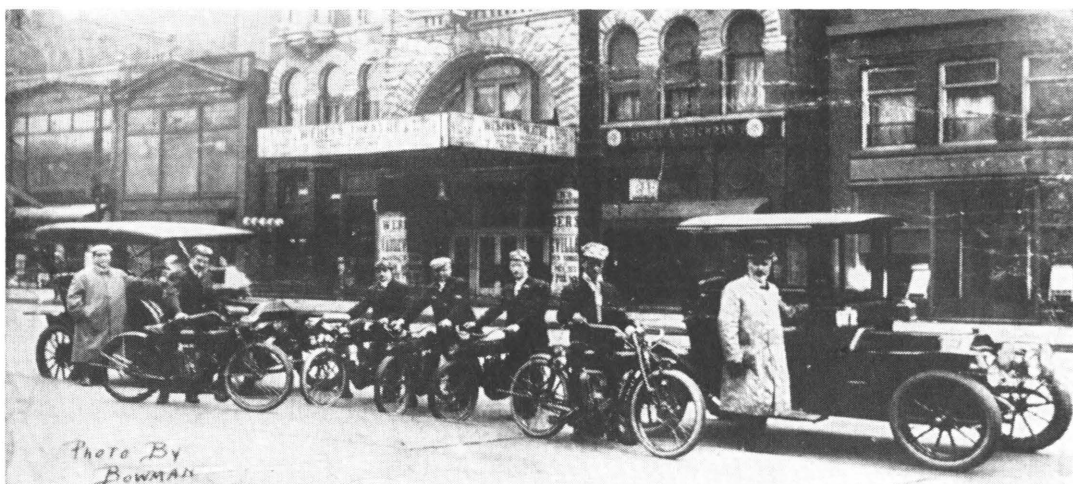
Too many of our young practitioners to-day depend almost entirely on the microscope, either in their own hands or, more frequently, in those of some pathologist, who, with all his knowledge, may be devoid of practical experience or even of common sense. . . . It is well to maintain a reasonable balance between science and practice, with perhaps a friendly leaning to the latter, in recognition of the old and well-established principle that in the ordinary work of life the practical man may get on fairly well without theory while the theoretical man without practice is almost certain to come to grief.

Dr. Rutherford was of the opinion that it would be profitable to divide the program into sections "so that each member may elect to listen to such papers as deal with the special lines of professional work in which he is most interested." Tait Butler had made the same suggestion in 1901, proposing sections on general practice, sanitary medicine, and research. The first sectioned meeting was held in 1910.

Secretary Lyman's report called attention to a number of inadequacies;

our present requirements for admission are inadequate . . . there is no ruling on the present method of electing officers . . . the ruling in relation to unethical practices is at present dilatory.

Dr. Lyman also suggested that "the position the Association has attained" war-



Members of the Chicago firm of Wright and Merillat in 1908. Dr. J. M. Wright (right) was State Veterinarian of Illinois; Dr. L. A. Merillat (left) was at various times practitioner, educator, author, military veterinarian, AVMA president, journal editor and historian, among other activities. Easton Iowa VMA Publication

ranted purchase of a typewriter for use by the secretary. At this time the Association had a total income of about \$4,500 and expenses of about \$2,500, of which \$1,500 was for printing the annual proceedings.

Following the practice established the previous year, the Committee on Diseases augmented its report, with papers being presented on rabies by J. R. Mohler, V. A. Moore, and C. H. Higgins. Rabies was selected, "As this disease, because of its wide prevalence, great economic and sanitary importance, and easy elimination, should not exist in this country." Papers were presented by C. M. Haring on tuberculosis, A. T. Kinsley and W. B. Mack on swamp fever, and Fred Torrance on internal secretions, the first paper on the new subject of endocrinology to be presented at an AVMA meeting.

A joint evening session was held with the Chicago Medical Society, the program being devoted to a consideration of milk and milk hygiene. The speakers included W. A. Evans, M.D., Health Commissioner for Chicago, M. H. Reynolds, and ex-Governor Hoard of Wisconsin, who made his famous remark concerning clean vs. "cleaned-up" milk: "I would not marry a woman that had been made clean."

With the admission of 177 new members, membership in the AVMA passed the 1,000 mark. A. D. Melvin was elected president; Drs. Lyman and White were re-elected secretary and treasurer, respectively.

### J. G. Rutherford

John Gunion Rutherford was born in Scotland, December 25, 1857, and came to Canada in 1875. He graduated first in his class from the Ontario Veterinary College in 1879, following which he practiced at various places in the United States, Mexico, and Canada. In 1884 he moved to Manitoba and became Veterinary Inspector for the province until 1892, when he resigned to enter politics, being elected to the Manitoba legislature, and in 1897 to the Dominion Parliament. In 1902 he was appointed Chief Veterinary Inspector, and in 1904, Veterinary Director General for the Dominion. It was primarily through his efforts that the Ontario school was made a provincial institution affiliated with the University of Toronto, which conferred upon him the degree of Doctor of Veterinary Science in 1920.

Dr. Rutherford joined the AVMA in 1902, was five times elected a vice-president,

and was elected president in 1908. This same year he was honored by being the first American graduate elected as an Honorary Associate of the Royal College of Veterinary Surgeons. Among other qualifications, it may be said that he was one of the few truly great statesmen which the American veterinary profession has produced. Death came after a protracted illness, at Ottawa, July 24, 1923.

### CROSSING THE CONTINENT

The first meeting of the Association in the far West was that of 1910 in San Francisco. President A. D. Melvin noted this fact in speaking of "the gratifying growth of our association, a growth not only in numbers and in territory represented, but in standing and prestige and in things accomplished." Regarding legislation before Congress which would have created a Department of Public Health, Dr. Melvin spoke favorably, except for a provision that would have transferred the Bureau of Animal Industry to this new agency:

The Bureau of Animal Industry is essentially an agricultural organization . . . even though some branches of its work have an important bearing on the public health. . . . The production and conservation of the public food supply are of the highest importance to human health, but the measures by which such production and conservation are accomplished are mainly agricultural. . . . The government's veterinary work should by all means remain under veterinary direction, even if regarded solely from the standpoint of efficiency without any regard to professional pride.

The Committee on Diseases noted:

During the past year our country has not been visited by any new or unusual epizootic disease . . . [nor] any severe outbreak of diseases indigenous to our country . . . [which] emphasizes the efficiency of the Federal Veterinary departments in both the United States and Canada.

Tuberculosis continued to hold the spotlight, with papers being presented by Drs. Mohler, Rutherford, V. A. Moore, Reynolds, Ward, and Haring.

Following a preliminary meeting of the Association of Veterinary Faculties and Examining Boards, the program for the first time was distinctly sectioned, with sessions on Medicine, Pathology, Milk Hygiene, and Surgery. A feature of the latter section was an address, reputedly extemporaneous, by L. A. Merillat on: "The Present Status of Animal Surgery in America." Never one to mince words, Dr. Merillat charges:

Veterinarians have much less to be proud of as surgeons than they have as workers in some of the other departments of the profession. . . . We have continued year after year to disobey the commonest laws which govern scientific surgical manipulations. . . . We have not attracted the greatest minds of the profession into the surgical ranks.

And on the subject of anesthesia, he asks:

To what extent have the veterinarians availed themselves of this great victory over surgical pain? . . . In the large colleges and in the larger hospitals, the spirit of compassion seems to prevail, but in the general practice there are still too many torturing operations performed without due and sufficient regard for the sufferings we inflict.

And on asepsis and hemostasis in surgery:

For twenty years the veterinary profession entirely ignored asepsis . . . [and] we are today knowingly guilty of practicing faulty methods. . . . We have been prone to wade through long bloody dissections, leaving the matter of hemostasis for the last step. . . . The surgical wound held free from blood by modern methods of hemostasis, held free of microbial contamination by modern methods of asepsis and inflicted without pain by modern anesthesia is our only path to that high level now occupied by the art of human surgery.

Dr. Merillat notes, however, that the profession had come a long way since "the institution of an almost shameful clinic at Omaha in 1898."

An unexpected "feature" of the trip west was the wreck of the "American Veterinary Special" train in the badlands of Montana. Several cars were derailed, but no one was hurt, and the affair took on something of the aspect of a picnic.

G. H. Glover was elected president; C. J. Marshall, secretary; and G. R. White re-elected treasurer.

#### A. D. Melvin

Alonzo Dorus Melvin, D.V.S., was born in Illinois in 1862, was educated in business, and graduated from the Chicago Veterinary College in 1886. He entered the Bureau of Animal Industry, and became noted almost immediately for his work in suppression of contagious pleuropneumonia in Illinois and Maryland — marking him as a man to be picked for greater responsibilities. He was successively Veterinary Inspector in Chicago and at Liverpool, England; in charge of Bureau work at the Union Stock Yards; Assistant Chief of the Bureau; and, upon the retirement of Dr. Salmon in 1905, he served as Chief of the Bureau of Animal Industry until his death on December 7, 1917. During his tenure as chief, he was largely responsible for major improvements in the federal meat inspection system, and for eradication or control measures against foot-and-mouth disease, Texas fever, sheep scab, dourine, hog cholera, and tuberculosis.

#### 1911

In his presidential address at the 1911 meeting in Toronto, G. H. Glover spoke of many things relating to the general theme:

We are proud of our chosen profession and the progress that it has made. . . . Harmony is the prime essential to strength in any institution, and to this factor must be attributed, more than to any other, the rare interest and splendid growth of the American Veterinary Medical Association.

The growth of the Association, while overdue, had been little short of remarkable. Membership (1,189) was twice that of five years before, and triple that of ten years earlier. California, which had the grand total of five members in 1905, added 36 at the meeting in San Francisco in 1910, and 32 more in 1911. Altogether, 435 new members were added to the roll these two

years — more than the total membership a decade before. Some of this increased interest in the AVMA, as in the case of California, undoubtedly can be attributed to that generated by moving the meeting site to new sections of the country.

The Surgical Section featured a paper on the roaring operation by W. L. Williams, and one on: "The Merits of Williams' Operation for Roaring," by Prof. Frederick Hobday of London. In the Section on Practice, H. Preston Hoskins made his debut with a paper on pneumonia, and K. F. Meyer, recently graduated from the veterinary school at Zurich, spoke on nephritis. Papers on various aspects of veterinary biologics were presented by P. A. Fish, E. L. Quitman, Adolph Eichhorn, A. T. Kinsley and R. A. Archibald; equine anemia was discussed by W. B. Mack; and bovine hematuria by Seymour Hadwen. The Sanitary Section featured papers by W. H. Dalrymple on anthrax and tick fever; C. D. McGilvray on glanders; and Cassius Way on milk sanitation. John R. Mohler, J. G. Rutherford and S. H. Gilliland discussed various aspects of the tuberculosis problem.

At the meeting of the Association of Veterinary Faculties and Examining Boards, Dr. Glover, president of this group also, charged that this body:

has not fulfilled the mission for which it was created. . . . We seem to have been lacking in the initiative, uncertain of our authority, and luke-warm as to the vital problems which affect our institutions.

Unlike the situation in past years, however, a vigorous program included papers by R. A. Archibald on suppression of correspondence schools; SESCO Stewart on uniform state board examinations; fundamental education by R. P. Lyman; anatomical teaching and nomenclature by Septimus Sisson and I. E. Newsom; and physiology and pathology in the curriculum by P. A. Fish and S. H. Burnett.

The surgical clinic, held at the Ontario Veterinary College, featured three roaring operations by Prof. Hobday, who also oper-

ated on two dogs. By comparison with the clinics of 1906 and 1907, when 36 of 40 operations were on horses, among the 47 animals in the 1910–1911 clinics were 12 dogs, 5 cows, and one pig.

As a matter of passing interest, the ladies, who had attended the meetings for the first time only 15 years earlier, outnumbered members of the Association (but not veterinarians) in attendance at the Toronto meeting.

In considering what the future might have in store, Dr. Glover notes:

In the face of past achievements and in the light of our present knowledge, it certainly is no idle dream to predict that the time is coming when it will be possible to build up the body defenses against any and all bacterial diseases. Our work must go forward by three parallel and seemingly important lines; first, combatting disease wherever found and by every known agency; second, fortifying the body by its natural defenses and other agencies; third, waging a relentless warfare against pathogenic microorganisms.

Samuel Brenton was elected president; C. J. Marshall and G. R. White re-elected secretary and treasurer, respectively.

### One Profession, One Title

For many years Alexandre Liautard had advocated a uniform veterinary degree, preferably administered by a central body equivalent to the Royal College of Veterinary Surgeons of Great Britain. Perhaps as an aftermath of his continual hammering on the subject, the matter became widely discussed about 1910. At the AVMA meeting that year, Dr. Glover, in considering the variety of titles extant, considered:

The crux of the whole matter is that there seems to be no serious objection to any one of these degrees, but the public are woefully ignorant as to their import because there are so many of them, and honestly believe in many cases that they stand for different vocations or different degrees of educational attainment in veterinary art, or something they scarcely know what. It is confusing to the public, engenders discord in the ranks, casts unfavorable reflec-

tions upon the profession, and no doubt has an economic significance.

D. Arthur Hughes, in speaking of the historical aspects of the degree dilemma in America, states:

The variety of titles conferred was due, in many instances, to the rivalry of the colleges. . . . From the beginning of veterinary education in this country this rivalry has existed, and it has, sad to relate, intensified and become, I fear, more vulgar as time has gone on—or at least it has, in many degrees and shades, cheapened the profession, and has the flaw of vulgarization in this matter of variegation of veterinary titles. . . . The consequence is that an evil has been done which cannot be effaced in our own or the next generation. Thousands of titles have been given which cannot now be expunged—only the agonizingly slow processes of time can wear away the large, funny titles from sign boards and door fronts.

Both Hughes (Cornell) and Glover (Iowa) had D.V.M. degrees, but neither overtly suggested that this form be given preference over some other.

The German-educated Olof Schwartzkopf, who signed his articles as “Veterinarian,” gives an extensive history of the veterinary degree in Europe and America, stating, “Our colleagues in Europe consider our numerous degrees a mystery, if they express themselves politely.” At the time (1911) 9 schools granted a *Doctor of Veterinary Medicine* (5 D.V.M.; 2 V.M.D.; 1 D.M.V.; 1 M.D.V.); 3 *Doctor of Veterinary Surgery* (D.V.S.); 4 *Doctor of Veterinary Science* (3 D.V.S.; 1 D.V.Sc.); and one each: *Veterinary Surgeon* (V.S.); *Doctor of Comparative Medicine* (M.D.C.), and *Bachelor of Veterinary Science* (B.V.Sc.).

With convincing logic, Schwartzkopf demonstrates:

By elimination of the degrees having no fixed or permanent standard, we have left for a choice the old V.S. and the more modern D.V.M. . . . [But] to fall back on the V.S. would be too great a reaction after we have allowed the veterinary doctor degrees to permeate the country. . . . Thus . . . let us choose the D.V.M. which is correct by precedent and tradition . . . and understood every where. . . . If we take the well-established M.D. as a

guide, the V.M.D. would perhaps be the best imitation. But as our degrees of doctor of veterinary medicine are now all written in English with the exception of one, the most proper American abbreviation is that of D.V.M.

Having read these discussions, a veterinarian sent in a card used by a nongraduate, which read: "Late Acting Veterinary and Chief Ferrier, Dep't of the Philippines." While the title undoubtedly was assumed without profound thought, "Veterinary" was — and is — acceptable British usage, and "Ferrier" is historically more correct than "Farrier."

### G. H. Glover

George H. Glover was born in 1864 and received a B.S. in agriculture from Colorado in 1884, and the D.V.M. from Iowa State in 1885, along with Sesco Stewart and W. B. Niles. Dr. Glover spent twelve years as an inspector in Colorado and Montana after graduation, following which he practiced for seven years in Denver, during which time he was also an instructor in the College of Agriculture for a short period. In 1907 he was instrumental in the establishment of the present College of Veterinary Medicine at Colorado State University, and served as dean until his retirement in 1932.

In 1910 he was elected president of the AVMA, the Colorado VMA, and the Association of Veterinary Faculties. He was said to have a ready pen and a ready tongue, and could write and speak for lay and professional audiences with equal facility — not only on veterinary topics, but on temperance, politics, or theology as well. Dr. Glover died at a ripe old age on January 11, 1950.

### 1912

At the 1912 meeting in Indianapolis, President Samuel Brenton acknowledged some discontent with the system of nomination of officers by a committee composed of past-presidents:

Our Association had a period when an unseemly struggle for official places, both elective

and appointive, characterized our annual meeting. . . . Many of the newer members . . . do not realize the beneficent influence of the present plan of nomination. It is very apparent to those who have long acquaintance with association affairs that our nominating committee has without prejudice endeavored to serve the very best interests of the Association.

The section on sanitary science featured a symposium on hog cholera; that on medicine a symposium on glanders, which included papers by R. S. MacKellar, K. F. Meyer and C. J. Marshall. As something of a new departure, the three sessions of the section on surgery were devoted to the clinic at the Indiana Veterinary College. The roaring operation was of paramount importance, with performances by W. L. Williams, J. N. Frost, L. A. Merillat, J. W. Adams and J. H. Blattenberg. In a paper on "The Surgical Relief of Roaring," Drs. Williams and Frost reported their work aimed at denudation of the lateral ventricles of the larynx, using the burr devised by Dr. Blattenberg — with poor results until Frost hit upon the "trivial" idea of adding a few wisps of cotton. They note:

Few operations in the history of veterinary surgery have undergone so rapid development as has that for roaring since our first communication to this society six years ago. During this brief interval the operation has been adopted practically wherever veterinary science is known.

Other papers included those on biologics by C. A. Cary; infectious abortion by Ward Giltner; communicable diseases by V. A. Moore; tuberculosis eradication by John F. DeVine; and clinical instruction by A. T. Kinsley.

It was decided to appoint a committee to assist the editors of farm journals "to purge their advertising columns of fake and misleading advertisements concerning proprietary preparations put out for the use of veterinarians and the public." While this committee was to act only upon request of a journal, the resolution creating it was adopted only after strong protests that failure to condemn an advertisement for a product of possibly doubtful merit would automatically constitute an endorse-

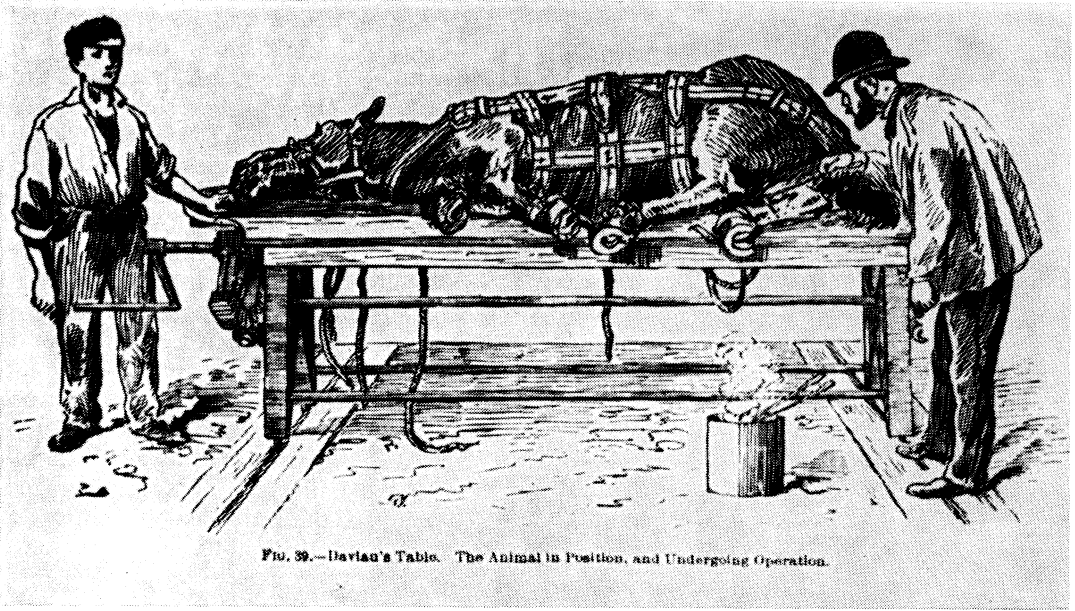


FIG. 39.—Davies's Table. The Animal in Position, and Undergoing Operation.

Large animal operating tables were in use at most of the colleges by 1900 and were an important factor in the development of improved surgical technics as well as a great boon to teaching. Liautard: *Surgery*

ment of that product. Nelson S. Mayo, who had championed the proposal, was made chairman of the committee, and C. A. Cary and S. B. Nelson were members. The following year they reported considerable progress, notably in having advertising for the London (Ontario) Veterinary Correspondence School completely eliminated from all periodicals. Some journals, as the *Progressive Farmer*, edited by Tait Butler, eliminated all questionable advertising—at a considerable cost in loss of revenue, but “Others, and among them some of the most influential papers of the continent, paid no attention to our letters.”

John R. Mohler was elected president; C. J. Marshall and G. R. White were re-elected secretary and treasurer, respectively. After a long tenure as librarian, W. L. Williams relinquished this post in favor of S. H. Burnett.

### Clinical Curiosities

The clinic at the Indiana Veterinary College may have afforded some members

their first acquaintance with the large animal operating table. Opinions concerning its merits were divided, for on the subject of “The Veterinary Operating Table,” W. L. Williams had noted in 1906: “The operating table for the horse has been enthusiastically championed and unsparingly condemned by veterinarians of high and low degree.” Some, he says, object to the table because it is not portable:

The same objection could be urged against an office, pharmacy or hospital. . . . Others have attributed their want of success in surgery to the lack of an operating table, and when they have tried the machine only to find that it can neither perform operations nor heal wounds they are very naturally disappointed. Others cling to the operating table, as a magnificent advertisement and use each opportunity to display the machine even for cases which could be better handled without confinement at all or in the stocks. . . . We could not consistently continue the use of the table in daily work for a period of 9 years, side by side with various kinds of casting harness . . . except it had for us some points of superiority. . . . Our study and experience leads us to assert that the operating table has a highly important place in the surgery of our domestic animals, and

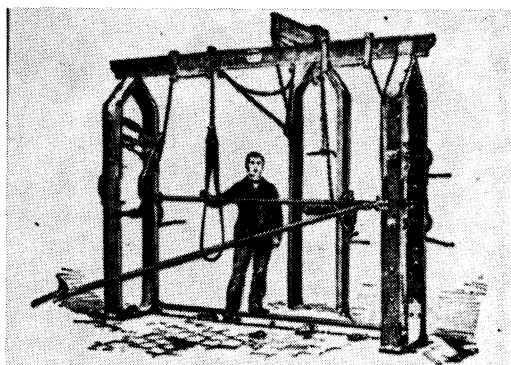


FIG. 17.—Winsor's Stock.

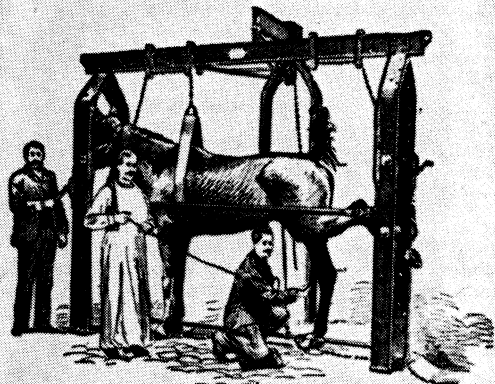


FIG. 17a.—Firing a Horse while Secured in Winsor's Stock.

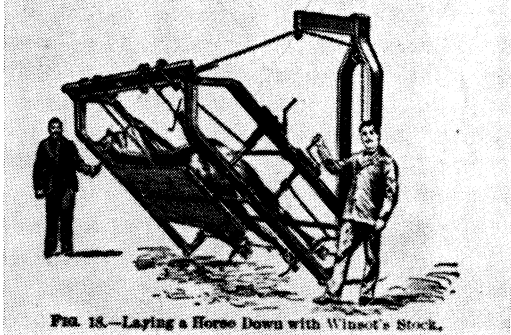


FIG. 18.—Laying a Horse Down with Winsor's Stock.

The merits of various types of operating tables were loudly proclaimed by some veterinarians — usually those who had them — and decried equally vigorously by others, who claimed they were impractical. Liautard: *Surgery*

that its use must constantly increase as surgery advances.

As major advantages of the table for certain types of surgery, Williams stresses the safety, comfort, and convenience of both surgeon and patient, and the greater possibilities of asepsis in operating.

The properties of the x-ray, discovered by Roentgen in 1895, were the subject of a lecture and demonstration to the students of the Ontario Veterinary College early in 1896. In noting this, the *Review* states, "The 'X ray' is, without doubt, destined to be of inestimable benefit to science in the near future." And in 1897: "The application of this comparatively recent discovery in photography has received more attention, we believe, at the hands of English veterinarians than with other practitioners."

In commenting on a report of the use of the x-ray to diagnose a case of persistent lameness in a trotting stallion — which was taken to the University of Kentucky Medical School for the purpose — the editors of the *Review* in 1910 note:

The clinical application of the X-ray, on account of expense and other reasons, certainly is not general; but we had the pleasure about two years ago of seeing, by the aid of the X-ray, an iron rivet in the digestive tract of a puppy, at one of the meetings of the Veterinary Association of New York City.

Writing on "The Use of X-ray in Veterinary Medicine" in 1915, H. E. Kingman, Sr., then Professor of Surgery at Colorado, mentions, "The literature in regard to the use of the x-ray in veterinary practice is indeed limited." He presents a number of cases in which the x-ray had been used to advantage in diagnosis:

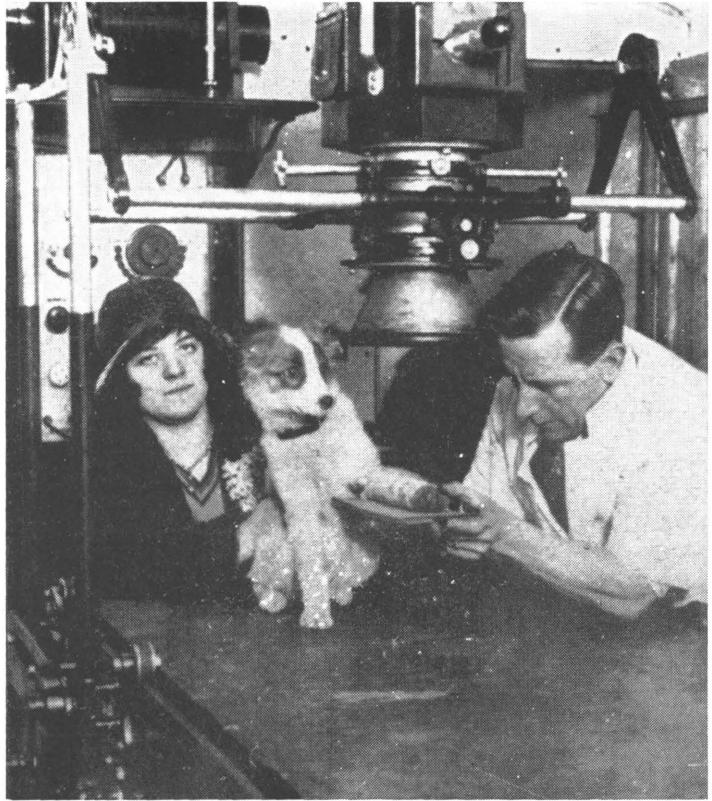
We cannot deny that many of the diagnoses of lameness made by veterinarians are arrived at through symptoms that are not always as plain as one might wish. . . . By being able to definitely diagnose one becomes more astute. By being certain of a diagnosis the practitioner becomes sure of himself and gains the confidence of his client. In our profession we are in need of more accurate means of diagnosis, and I firmly believe that the x-ray can be made to occupy a great field in the diagnosis of disease in the large animals.

### Small Animal Medicine

Speaking on "Canine Practice" in 1912, J. C. Flynn accuses:

A great many times I have been told by my client that he had called in some certain doctor

During the 1920's a few veterinarians employed radiography extensively—but usually without adequate safeguards—and many suffered serious x-ray burns. *Veterinary Medicine*



on a number of cases and that each time the latter's advice was, "Oh, give it a dose of castor oil." To take it for granted that the laity knows nothing of disease and medicine, and that their pet stock can be handled in a careless manner, is a grave mistake. We lower ourselves and our profession in the eyes of the public when we fail to treat the dog in the same scientific manner in which we treat the other domestic animals. . . . The owner can only infer that one of two conditions exists. The veterinarian either does not care for his dog practice or he does not know how to intelligently treat the dog. . . .

The veterinarian is not alone to blame for the lack of proper care of the sick dog. Our schools and colleges have failed to grasp the true situation and have not impressed upon the minds of the student body the necessity of a thorough training in canine practice. . . . In this day and age, when canine breeding has reached a condition which we may well call an art, it behooves us as veterinarians to give this important branch of veterinary science a close study. . . . "The dog is his own doctor" is a phrase you hear every day, and a number of our profession agree to it. The dog is his

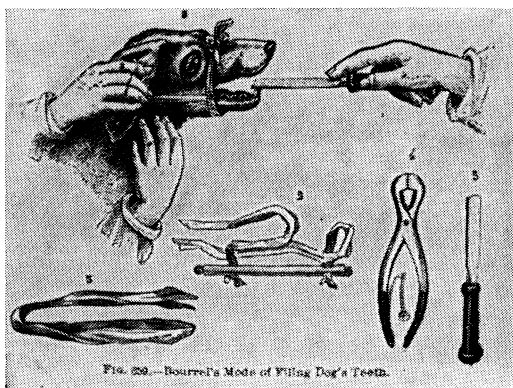
own doctor, it is true in a measure, because conditions have made him such. He is not so by his own choice any more than you or I."

Referring to what he terms the first period of small animal practice — prior to 1920 — J. V. Lacroix states:

Only a small number of veterinarians gave any considerable portion of their time to small-animal practice and few of these hospitalized dogs and cats. In fact, many well qualified veterinary practitioners, during much of this period, did not feel complimented when their horse-owning clients requested them to give attention to ailing dogs. In such instances, attention given to a dog or a cat was usually gratuitous.

Dr. Lacroix credits Flynn with having had more influence on the development of small animal practice than the sum total of all other factors in the 1920's:

Dr. J. C. Flynn gave the better part of two years of his time, without compensation, in



Canine dentistry, as practiced in Europe, was advocated in this country during the era when equine dental operations were popular—long before small animal practice had developed to any appreciable extent. Liautard: *Surgery*

criss-crossing the country by automobile accompanied by Mrs. Flynn, in response to invitations extended by the secretaries of veterinary organizations, small and large. Doctor Flynn was a successful practitioner in the treatment and hospitalization of small animals at Kansas City, Mo. He was a capable and versatile exponent of demonstrational methods, and whenever he gave clinical demonstrations, attendance was good and interest high. His sutureless technic for spaying puppies, created of economic necessity in his practice, was something of a sensation as he executed this operation. . . . With an unusual background of experience in small animal practice, a good speaking voice, and a ready wit, Doctor Flynn quite naturally encouraged hundreds of veterinarians to engage in small-animal practice.

On the construction of small-animal hospitals, Dr. Lacroix states that Duncan McEachran, at Montreal in the 1880's, was one of the first to provide hospitalization for dogs and cats. And:

in subsequent years veterinarians here and there provided modest facilities for the treatment of small animals, chiefly dogs. But, it was Flynn who set an example by offering hospital facilities in a good building especially designed and constructed for the purpose before World War I. . . . It was not until the late twenties and early thirties that many well constructed hospitals . . . were available.

The first extensive reporting of topics in small animal medicine was a monthly Department of Cynology, conducted by C.

G. Saunders in *Veterinary Medicine*. This began in 1913, and ran through 1914, during which time what amounted to a textbook in serial form was published. *Veterinary Medicine* was a leader in presenting departmentalized veterinary topics, a number of which were in the nature of pioneering in these fields: poultry practice (B. F. Kaupp), swine practice (A. T. Kinsley), laboratory diagnosis (C. F. Lynch), plant poisoning (L. H. Pammel), parasitology (M. C. Hall), zootechnics (E. Merillat), and cattle practice (J. F. DeVine). Departments of Surgery (L. A. Merillat) and Foreign Abstracts (A. Eichhorn) had been pioneered in the *American Veterinary Review* by Merillat and Liautard, respectively.

On the subject of canine pathology in 1916, *Veterinary Medicine* editorialized:

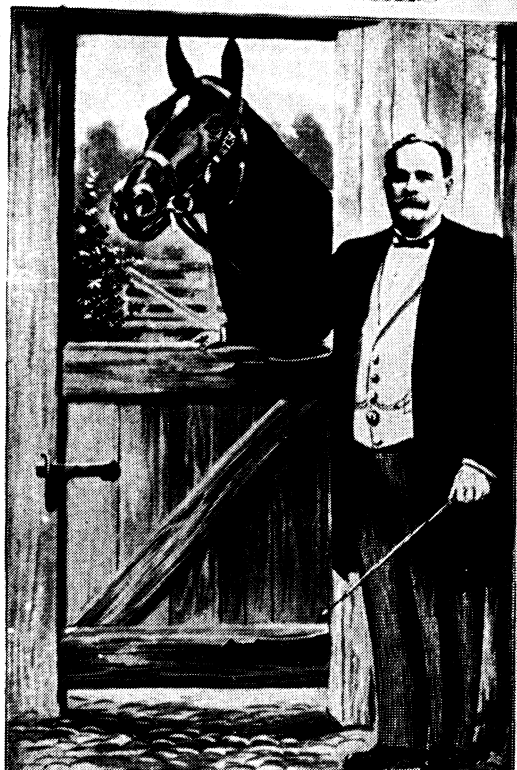
A lack of interest on the part of students, amounting to a positive hindrance, and not incompetency of lecturers on this subject, is the chief difficulty to giving more efficient instruction in canine pathology in this country. The average veterinary student reared in the country is not a champion of the dog, does not look upon canine practice as being worth while and is not at present an enthusiastic supporter of this part of the veterinary college curriculum.

### Botany and Biologics

In writing on "The Veterinarian and Poisonous Plants" in 1912, D. A. Hughes states:

We know that poisonings from eating noxious plants are common; yet the records of them are not made, at least not published. . . . Undoubtedly poisonous plants should be made a branch to be taught as a part of every veterinary college curriculum. . . . [The teaching] must be the work of a veterinarian rather than a botanist; for it is the veterinary aspect of the case which rightly appeals to the veterinary student. . . . The path of the student of plant toxicology is beset with many difficulties, as many plants only in part are toxic; or only in certain periods of their growth; or under conditions of decay; or because of alterations in their substance produced by seasonal conditions. . . . The chemistry of plant poisons is in its infancy. . . . Manufacturing chemists have exhibited a fearful neglect of plants now called poisonous, which will prove to be medicinal plants with many virtues in the alleviation of disease when their merits have been

DR. A. C. DANIELS



Daniels' *Dog Doctor* was one of few such advertising pieces during the early twentieth century to be devoted entirely to the canine species.

studied. . . . There are a few forms of poisonings of which we know something—such as locoisim, delphinosis, hemlock poisoning, lupinosis, ergotism, mountain laurel poisoning.

The development and relatively successful use of anthrax vaccination in the 1880's paved the way for the introduction of other biological products: tetanus antitoxin, tuberculin, hog cholera serum, and autogenous bacterins, among others. A number of these were used with good, bad, or indifferent results by some veterinarians, or not at all by others. Obviously many of the poor results attributed to their use stemmed directly from faulty standardization; a practitioner who had good results with the product of one manufacturer would lose a distressing number of cases with another product. This led the *Review* in 1910 to editorialize:

To all lovers of the Dog,  
this book is dedicated.

**REVISED**  
**HOME TREATMENT  
FOR SICK DOGS**  
▼▼  
**DR. A. C. DANIELS'**  
**WARRANTED**  
**Veterinary Medicines**  
**AND HOW TO USE THEM**  
ALSO  
*The Causes, Symptoms and Treatment  
of the Diseases for which They are Used*

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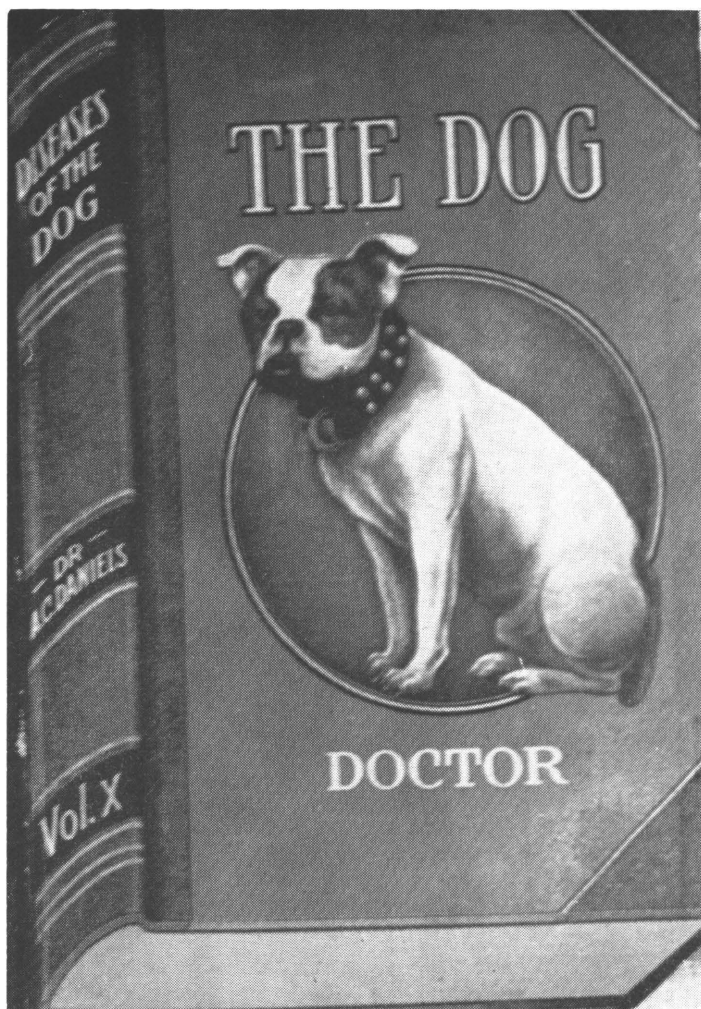
▼▼  
Every Package Warranted to Please the User

**DR. A. C. DANIELS (Inc.)**  
BOSTON, MASS.

The result of the investigation recently made by the United States Department of Agriculture through its Bureau of Animal Industry, on the standardization of tetanus antitoxin, demonstrates clearly the advisability of federal supervision over its manufacture, and over all biological products used in veterinary medicine.

Writing on "Biological Therapeutics in Veterinary Practice," in 1910, T. F. Krey states:

Not many years ago serum therapy in the treatment of disease was considered skeptically. Even the most progressive veterinarians looked upon its use as an expensive experiment only to be considered as a last resort, and then, only in extreme cases where the life of a valuable animal was threatened. To-day we find a vast majority of veterinarians fully alive to the importance of serum therapy and ever ready on all occasions to administer serums, antitoxins or vaccines, whenever their use is indicated.



The proprietary medicine fraternity was ever alert to means for subtle as well as overt promotion — this seemingly massive volume is only a cover illustration for a small booklet on remedies for dog diseases.

As a special form of biological therapeutics, a fashionable practice in the early 1900's was that of "autotherapy." As elucidated by C. H. Duncan, M.D., in an address before the New York City VMA in 1912:

Specific antibodies are developed in healthy tissues by auto-inoculation . . . that is, by the introduction of the toxic substances developed during the course of the disease in healthy tissues. The process tends to bring about a natural cure . . . Rule I. In extra-alimentary and extra-pulmonary diseases if the toxic product of the disease is placed in the mouth it will tend to develop specific antibodies. . . . Rule II. In intra-alimentary and intra-pulmonary diseases if the toxic product of the disease be placed in healthy tissues outside of these

systems, it will tend to develop specific antibodies. . . . The therapeutic value of autogenous pus, given in this manner, is greater than the autogenous vaccine prepared from a pure culture of the offending micro-organism by the method now in vogue.

Thus for infected wounds, Duncan prescribes for his human patients, "a drop or two of pus every hour for three hours," and for puerperal septicemia, "a weak dilution of the lochia in the mouth. . . . It is only going one step farther, to place a part of the menstrual discharge in the mouth to cure some forms of pelvic disorders." (!)

This appears in the *Review* without comment from the editors; in 1914 it carried

a report of a homeopathic medical society on the efficacy of autotherapy, in particular, that advocated by Duncan. Veterinary autotherapy was held in high esteem by a number of noted veterinarians, among them D. J. Mangan, Chief Veterinarian of the New York City Department of Street Cleaning, who had 4,000 horses in his charge:

He has used Dr. Duncan's autotherapy for four years in all forms of sepsis, and endorses it highly. In some disorders of the horse, as in ozena or nasal gleet, acute infections of the hoof and fistula of the dorsum, autotherapy is by far the best treatment and in some cases the only successful treatment. He believes that he probably cured one case of glanders.

*Veterinary Medicine* also took note of autotherapy. And although the editor, D. M. Campbell, apparently gives tacit approval to certain aspects of the practice, he characterizes as "rotten therapy" the administration of pus *per os* in the treatment of fistula:

Similia similibus curantur with a vengeance. Next someone will give teaspoonful doses of crushed bone for fractures and phonograph records of coughing for tuberculosis. . . . To my mind the oral administration of suppurative discharges from fistulous tracts, gonorrheal lesions, or other chronic suppurating conditions, is the very antithesis of scientific treatment and cannot by any possibility have any beneficial therapeutic effect.

At the same time Mart R. Steffen, a regular contributor to *Veterinary Medicine*, writes concerning Duncan's claim that milk from a fresh cow injected subcutaneously into one in declining lactation will stimulate milk flow:

While it looks rather fishy, we will not laugh until we have tried it out. If the news, for such it is to us, came from anyone but Dr. Duncan we might have a little more faith in it. But we happen to know that the doctor seems to have a mania for this "like cures like" method of therapeutics. For the past seven or eight years he has been in convulsions over it.

It was about this time that L. A. Merillat recommended the radical operation for fistula as the best hope of permanent cure.

## Price and Prejudice

In a good summary of the status of veterinary biological products in 1912, R. H. Wilson states:

It is only within the past few years that biological products have been employed extensively in veterinary medicine. There has existed more or less prejudice against them on account of their expense and apparent inefficiency in some cases. But this prejudice has been practically eliminated, and the demand for the products would indicate that their practical value in most instances has been proven without a doubt. . . . If medical research is as fruitful in the future as it has been in the past, it would seem that the time is not far distant when practically every form of infection can be successfully combated with a biological specific.

The preparations he notes as being in demand include anthrax vaccine, either as an attenuated living virus, or a killed vaccine, the latter having the advantage of not being able to cause the disease; the former, "by its promiscuous and reckless use it may be the means of spreading the disease instead of curbing it." Also blackleg vaccine, in the one or two inoculation form; and rabies vaccine, which

owing to the complicated nature of the treatment, it has not been employed in veterinary medicine until quite recently. . . . Reports indicate that the method is attended with the same degree of success as in dealing with rabies in man.

Concerning the tuberculosis vaccine on the market: "The practical value of this product is rather doubtful."

On the use of bacterins — a more scientific form of autotherapy — he says:

The results obtained by the use of bacterial vaccines, properly prepared and administered, are indeed gratifying. Many stubborn suppurative conditions, such as fistulous withers, poll evil and quittor, which do not yield to ordinary surgical and medicinal treatment, are benefited and completely cured by bacterial vaccines. Febrile disorders due to bacterial infections, in many cases respond to bacterial therapy and make rapid recoveries.

On tetanus antitoxin:

As a prophylactic agent against the disease this product is now generally recognized as a specific. . . . Many operators will not undertake an operation of any consequence without first administering tetanus antitoxin.

And on hog cholera serum: "This product devised by Dorset and Niles is at present probably the most reliable biological product for combating hog cholera." Other antisera of use are: influenza antitoxin, antistreptococcic serum, and antianthrax serum. Biological diagnostics in use include tuberculin:

the most extensively used biological diagnostic agent in veterinary practice . . . of great value in detecting tuberculosis and if it is honestly and intelligently applied can be considered sufficiently reliable to be depended upon in every case.

Mallein is characterized as "a fairly efficient agent in dealing with glanders. If the operator is familiar with all the details of the test and capable of interpreting the results, its usefulness cannot be doubted." During World War I it was claimed that many horses were needlessly destroyed because of faulty readings of the mallein test.

Speaking on the need for standardization of biological products, C. A. Cary charges in 1912:

The multiplicity of biological products that may be found on the market causes the public to open its mouth, buy, devour, suffer, get relief, or get no action, paying the price regardless of results. . . . All that is required is a little pressure of the hypodermic syringe, and the mysterious biological product will do the rest.

Lack of standardization, he emphasizes, has been the cause of tuberculin's having for some twenty years a "variable and checked" history; and on anthrax vaccine:

Doubtless the indiscriminate sale of anthrax vaccines to the laymen, and possibly to professional men, has been the means of disseminating anthrax, especially where the germs were not properly attenuated.

The alternatives suggested by Cary are government manufacture and distribution, or government supervision of commercial production:

I do not wish to imply or to assert that much good has not been done by the manufacturers of biological products. In fact, they have done a great deal that could not have been accomplished without their work.

### High on the Hog

Speaking on "The Highway of Service" in 1925, D. I. Skidmore, Chief of the Division of Virus-Serum Control of the BAI, notes the existence of 91 establishments operating under government license, of which 57 produced hog cholera serum and virus only. More than 760 million cc. of serum and 34 million cc. of virus were produced in 1924; cost of inspection was about \$150,000. In one year 9 million cc. of serum had been condemned: "The value in hogs conserved by denial of the use of this rejected serum is estimated as approximately \$4,000,000." The stimulus to production due to the fact that potent serum and virus were available was estimated at another four million dollars per year.

Noting that some thoughtless persons had complained that the government took greater interest "in the protection of our livestock than of people," Dr. Skidmore asks:

Is it for the comfort and welfare of the hog that we immunize it against hog cholera? . . . We serve and promote the welfare of men, women, and children and contribute to the happiness of humanity by providing a way for the accomplishment of the things which aid in conserving the live stock industry. . . . The producer of biologic products of proven value may well feel a personal pride in the part which he takes in this service.

### GOLDEN JUBILEE

The fiftieth anniversary meeting in 1913, held in New York City, was to have been graced by the presence of its honorary president, Alexandre Liautard, who since 1900 had been living in France. Illness of his wife, however, prevented Dr. Liautard, the

only living founder of the Association, from attending. In his address, read at his request by his former partner, R. W. Ellis, Dr. Liautard recounts the early days of the Association and notes that with the change of name:

Her history is but the continuation of her former life, and her membership is larger than that of any other similar body in the world. Her word is known, recognized and appreciated in every scientific veterinary center, for she will forever remain the solid representative of our profession in the new world. She has stretched her roots in every specialty of our branch of medicine . . . everywhere the A.V.M.A. finds many of her worthy members. . . . The Association has proved and will always remain true to her original motto, *Non Nobis Solum* — "Not for us Alone."

John R. Mohler, president of the Association, in doing honor to the founding fathers, recalls:

At a time when everything seemed in an irrevocable turmoil, there were found some indomitable veterinarians sufficiently resolute to brave the existing storm. It was reserved for these men to be the first to conceive in wisdom and establish in strength an association qualified to meet successfully the purpose of the founders and to serve triumphantly as one of the pioneers of veterinary societies. Undeterred by the lack of numbers and unyielding to the clamor of radicalism, it has held fast consistently to a sane equilibrium and has demonstrated its merits by its survival.

Dr. Mohler dwells at length on the achievements of the veterinary profession, noting:

The acquirement of knowledge in the domain of animal diseases during the last five decades has been constant and amazing and compares favorably with the progress in other branches of science which has attracted the admiration of the world. As chemistry and physics have advanced from alchemy, and astronomy from astrology, so has veterinary medicine progressed from empiricism and become scientific.

In summary, he urges:

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.

Several changes in the structure and operation of the Association were discussed following recommendations of the committee on reorganization, with D. E. Salmon as chairman and James Law, D. M. Campbell, George H. Hart, and C. J. Marshall as members. The most sweeping change was one calling for creation of a House of Delegates which:

should represent the delegated power of the members of the A.V.M.A. and be the national representative body of the constituent Associations. It should elect the general officers of the Association and a board of nine trustees, and should transact all the general business of the Association.

This, however, failed of adoption; another two decades was to pass before the present House of Representatives became a reality.

In offering a dissenting opinion to the majority report of the committee on reorganization, D. M. Campbell proposed that nominations for elected offices be made by the membership at large via a mailed form; the Executive Board would tally the votes and place in nomination for each office the names of the two men from each of five districts who had received the greatest number of votes, whereupon the entire membership would be eligible to vote via mail ballot. Dr. Campbell perhaps objected less to the majority recommendation on this point than to the current method of nomination by the past-presidents. This, he felt, was lacking in democratic principle inasmuch as a small group of men — who, in effect, determined the makeup of the committee — could wield power for long periods. As a matter of passing interest, under this arrangement W. L. Williams could have been a member of the nominating committee for 52 years, Tait Butler and G. H. Glover for 40 years.

Dr. Campbell's plan, however, might have created some difficulties in that it would have been possible for one man to be nominated for several offices. He did win a partial victory in that the nominating committee was dropped and the previous plan of nominations from the floor reinstituted. The Executive Board continued as an appointive body.

Dr. H. S. Murphey called for action "to provide for an outline of the history of veterinary progress in this country during the past fifty years." As a result, the first committee on History was appointed, with D. Arthur Hughes, chairman, and H. S. Murphey, Tait Butler, W. L. Williams and F. H. Osgood as members.

A number of the men who participated in the program helped frame the accomplishments for the second 50 years to the Centennial: J. V. Lacroix presented a paper on abdominal wounds; H. D. Bergman one on therapeutics; H. E. Kingman, Sr., on anesthesia; K. F. Meyer on paratuberculosis; and B. A. Beach (with F. B. Hadley) on chickenpox. Others present at the meeting included R. S. MacKellar, Sr. and Jr., Evan Stubbs, H. L. Gilman, E. C. Deubler, J. E. Weinman, and J. P. Hutton.

Reports on the "Kansas horse plague" — encephalomyelitis — of 1912 were presented by A. T. Kinsley and B. F. Kaupp; on dourine and glanders by J. R. Mohler, Adolph Eichhorn, and B. T. Woodward; on tuberculosis by C. M. Haring, S. H. Gililand and C. J. Marshall; Texas fever by John Kiernan and G. R. White; colic by L. A. Merillat; mastitis by L. A. Klein; and infectious abortion by W. L. Williams, J. N. Frost, W. E. Cotton, K. F. Meyer and E. C. Schroeder. Various aspects of therapeutics were presented by P. A. Fish, H. Jensen and R. A. Archibald. The scope of abdominal surgery was discussed by Frederick Hobday of England and by J. H. Blattenberg; other surgical topics included roaring by L. A. and E. Merillat; lameness by John W. Adams and Joseph Hughes; and firing by George B. McKillip. Other notables on the program included Cassius Way, L. Enos Day, Carl W. Gay and J. F.

DeVine. Sesco Stewart, president of the Association of Veterinary Faculties and Examining Boards, addressed that body on the need for a standard examination for licensure. Few programs, perhaps, have included so liberal a representation of notable men — already so, or who were to make their mark in the veterinary profession.

C. J. Marshall was elevated from secretary to president, and Nelson S. Mayo elected secretary; G. R. White was re-elected treasurer.

### **The Association at the Half Century**

Dr. Mohler's address at the fiftieth anniversary meeting stands in stark contrast to that by R. S. Huidekoper at the quarter-century mark. In reviewing the accomplishments of 25 years, Dr. Huidekoper had observed:

The meetings were always pleasant affairs socially . . . and we learned to know each other and to fill the want of professional friendship which is felt by many who stand alone in new localities. Some meetings were replete with papers. . . . Other meetings, and there were unfortunately many of them, have been devoid of any public interest.

In 1888 the Association numbered 207 members, of whom 42 attended the meeting — one more than in 1863. Dr. Liautard had charged: "The meeting of 1888 was remarkable for its quietness, its somnolence — in fact the torpid condition which seemed to prevail." By comparison: "In 1863 all was activity, movement, discussion, anticipation and hope."

In 1913 the Association numbered some 1,650 members, and some 260 new members were added at the meeting. At this time there were 31 Honor Roll (twenty-five-year) members, of whom 17 were present; 4 of these lived to become fifty-year members: J. C. Meyer (1925), Benjamin McInnes (1926), L. H. Howard (1932), and G. H. Berns (1934). Alexandre Liautard, although an honorary member since 1900, was the first to complete 50 years of active identification with the Association (1913).

During the first 25 years the Association had been dominated by a New York — Mas-

sachusetts axis; only one annual meeting was held elsewhere, and 13 of 15 presidents had been from these states. During the second 25 years only two meetings were held in New York, one in Boston, and 16 of 21 presidents were from other states. Concerning the Association in 1888, D. M. Campbell observed:

It was national in name only. . . . Its importance in veterinary medicine was already on the wane. . . . National leaders thought the Appalachian Mountains were the dividing line between domestic animals and the buffalo.

But in 1913:

It was a different veterinary science, a different veterinary art, and a different veterinary service that the A.V.M.A. surveyed on its 50th anniversary. . . . It was a very different meeting of the association that President Mohler called to order on September 1, 1913.

If the reports of the state secretaries are an accurate reflection of the status of the veterinary profession at this time, a sampling indicates:

California is in a prosperous and very satisfactory condition generally. . . . Colorado has made steady advance. . . . In Connecticut . . . interest in the profession is keen. . . . In Georgia, opportunities for practitioners, very good. . . . In Maine, much has been accomplished. . . . In Maryland, our veterinarians look prosperous and happy. . . . In Mississippi, veterinary matters are making progress. . . . The profession in Missouri is in a prosperous and healthful state. . . . In Nevada, conditions for practice are growing better. . . . Conditions in New York have been steadily improving. . . . In North Dakota, practice has become quite lucrative. . . . In Ontario, practice has been good. . . . Tennessee has been marked by continued improvement. . . . In Wyoming, conditions are the very best that could be expected.

#### J. R. Mohler

John Robbins Mohler was born May 9, 1875, and was educated in Philadelphia, receiving an M.A. from Temple University in 1893 and the V.M.D. from the University of Pennsylvania in 1896. Then he did advanced work at Marquette University and at Alfort. In 1897 he entered the Bureau

of Animal Industry as a field inspector in the Quarantine Division. Later he was transferred to the Meat Inspection Division, and in 1899 to the Pathological Division, becoming its chief in 1902. In 1914 he became assistant chief of the BAI, and chief in 1917 upon the death of A. D. Melvin.

By the time he was elevated to chief of the Bureau, Dr. Mohler had already authored, co-authored, or translated some 5,000 pages of veterinary literature; he had been vice president of the U.S. Livestock Sanitary Association (1910), member of the International Tuberculosis Commission (1910), and vice president (1911–1912) and president (1912–1913) of the AVMA, among numerous other activities. At 37, he had been the youngest AVMA president since 1900; the twelve men preceding him averaged more than 50 years of age at the time of election. In 1915 it was said of him:

He has been found fit in all the trials of high public office . . . and, as he rose in favor, at every step has merited his promotions by scientific activity and productiveness.

In 1939 he was awarded the Twelfth International Veterinary Congress prize, and in 1943, upon his retirement as chief of the BAI, he became the first recipient of the AVMA award. His death on February 12, 1952, terminated one of the most productive careers in the history of veterinary medicine.

#### DEBUT OF THE JOURNAL

Through the good offices of W. H. Dalrymple, past-president of the Association, and long the outstanding exponent of veterinary medicine in the South, the 1914 meeting was scheduled for New Orleans in December. Shortly before convention time, however, C. J. Marshall — undoubtedly acting in what he thought was the best interest of the profession — decided the meeting could not be held as scheduled. A postcard ballot was sent to the membership asking for a vote on postponement,

accompanied by the following statement from Dr. Marshall:

As you know apthous fever exists in sixteen states. All Federal agents, all state agents in these states and many private practitioners, many of them members of the Association, are engaged in exterminating the disease. For this reason it will be impossible for these members to attend the meeting scheduled for the last week of December in New Orleans.

This, of course, was tantamount to a directed vote, and the cards were sent so late that no other action was logical, or even possible. In commenting on this action, D. M. Campbell names it:

a calamitous thing, absolutely uncalled for. . . . Illinois was hit as hard as any state by foot-and-mouth disease . . . yet during the first week in December, Illinois veterinarians held the greatest meeting in the history of their association. . . . Even before the announcement of the postponement word came from Washington that the epizootic is completely under control. . . . I believe that he [Dr. Marshall] . . . has let slip the greatest opportunity that the A.V.M.A. has ever had to impress its usefulness upon the public.

As predicted by Dr. Campbell, the meeting for 1914 was not held.

This void in the proceedings of the Association makes it convenient to discuss an action taken at the meeting of 1915, the spadework for which, of course, had been initiated much earlier. This action was the re-acquiring of the *American Veterinary Review* as the official organ of the AVMA. In accordance with the expressed opinion of the Executive Board, it had been resolved, "to take such measures as may be necessary to establish an official organ of the association as *The Journal of the American Veterinary Medical Association*." While there appears to have been no preconceived idea of purchasing back the *Review*, the feeling developed that this would be preferable to starting a new journal. A prime factor in having a journal was the expense of printing the *Proceedings* each year; these cost about a dollar a copy to print and mail, and members received them free so long as their dues

(\$3.00) were paid. Moreover, this was a most inefficient arrangement, for most of the papers were printed in the *Review* anyway, frequently in advance of publication of the *Proceedings*.

When Dr. Liautard returned to France in 1900, he presumably sold his remaining interest in the *Review* to R. R. Bell (already a co-owner), who along with R. W. Ellis continued to edit and publish it. With Dr. Bell at the helm (associate editor since 1896), the *Review* steadily improved in quality, and at his death in 1900 his interest was bought by Dr. Ellis, reputedly for \$2,500, the same amount paid by the AVMA for the rights to the journal in 1915. By this time, however, the *Review* — as stated by Merillat and Campbell — "was moribund," and, without generous support by the veterinary book publishers and the colleges (most ran half or full page advertisements), "the publication must have had a large deficit and one concludes, would have failed as so many American veterinary publications have done."

Dr. P. A. Fish of the New York State Veterinary College was appointed editor, a position he held until 1918 when he entered military service. He was succeeded by W. H. Dalrymple, who because of failing health relinquished the post to John R. Mohler in 1919. In 1923 the offices of secretary and editor were combined, with H. Preston Hoskins filling this position until 1939.

### Egg Farmers and Endocrinologists

In writing on "What Veterinarians Should Know About Diseases of Poultry," B. F. Kaupp in 1914 states:

The poultry industry is being heralded as a billion dollar business. . . . It is high time the veterinarian was awakening to the possibilities of poultry practice. It is charged that the average poultryman is a "tight wad." But the fact remains that he is no tighter than many of us can remember he was in being "chary" about employing a veterinarian to treat his ill horse or cow twenty years ago. If the veterinarian really become proficient and shows his proficiency he will be in demand.

With about 3 per cent of veterinary income in the 1950's being from poultry practice, perhaps much the same might yet be said.

In 1916 P. A. Fish editorialized:

Veterinarians have been inclined to ignore poultry practice and this in due time may arise to trouble them. . . . If they are derelict in their duty then we may expect the matter will be taken care of by others. . . . Not many years ago small animal practice, as a specialty, was a rarity; now it is common and profitable. Time is demonstrating that the veterinary is a comprehensive profession and that more opportunities for specialization exist than in the past. The veterinarian is the logical one to develop these opportunities and as they develop the profession becomes more attractive and more important in the minds of the general public.

In writing on "Hormones and the Ductless Glands" in 1915, when the science of endocrinology was in its infancy, P. A. Fish notes:

It is an interesting fact that some of the ancient ideas, based largely upon superstition, and wholly theoretical in character, have, in the light of later scientific research, possessed, in a far-fetched way, some germs of truth in them.

In reviewing the knowledge of the times on the few hormones that had been studied, he predicts a great future for adrenalin:

Therapeutically it is often used on an empirical basis, but with our increasing knowledge of its physiologic action rational explanations for its use may be looked for in the future.

The then-extraordinary finding that pregnancy in one member of a pair of Siamese twins resulted in lactation in both, with subsequent laboratory confirmation in rabbits, led him to predict:

A beginning has been made in the laboratory which when properly worked up and followed out may influence our relations with the milch cow. The day may not be exceedingly remote when the hormone of an extract from fetal calves may be utilized economically and found to be as generally efficient as the service of the bull.

In this, of course, he had reference to the artificial stimulation of milk secretion — not of conceiving calves — but, then, who knows?

### P. A. Fish

Pierre Augustine Fish was born at Chat-ham, New York, February 17, 1865. After graduation from Hartwick Seminary in 1885, he received the B.S. in 1890 and the D.Sc. from Cornell in 1894, D.V.S. from the National Veterinary College in Washington, D.C., in 1896, and the D.V.M. from Cornell in 1899. Having worked under V. A. Moore while the latter was with the BAI, Dr. Fish returned to Cornell with Dr. Moore as a member of the first faculty in 1896, becoming a full professor of physiology in 1902. Upon retirement of Dr. Moore as dean, Dr. Fish was appointed his successor.

Earlier editor of the *Cornell Veterinarian*, Dr. Fish was appointed first editor of the newly acquired *Journal of the American Veterinary Medical Association*. In 1918 he relinquished his post to become a major in the Veterinary Corps. He was the author of several works on veterinary physiology and therapeutics, and was a frequent contributor to the *Journal*. He was a vice president of the AVMA (1908) and president of the New York State Veterinary Medical Society (1915). Dr. Fish died at Ithaca, February 19, 1931, only a week after Dr. Moore.

### 1915

In his presidential address at the 1915 meeting in Oakland, California, C. J. Marshall dealt largely with the foot-and-mouth disease outbreak which had been the cause for postponing the meeting of 1914. With praise for the work of the BAI, but with something less for that of the states, he charges:

Even a slight study of the diversified legislation scattered through the forty-eight states discloses the great inaptitude with which the problems have been approached. Powers grudgingly given, jealously curtailed, ignorantly

divided and weakened, spell a pall through the years of futility, ignorance and sordid greed. . . . Let us urge upon the lawmakers in all of our States to recognize disease as a common foe to be fought with might and main — not singly, but in a hearty cooperation, if the years to come are to note any advance in the struggle.

The matter of incorporation of the Association, first broached in 1869 and dropped in 1872, was brought before the Association by a recommendation of the Executive Board. An objection to incorporation was raised by W. H. Hoskins, who although a good business man himself, thought this would make the Association vulnerable to being sued. R. P. Lyman, however, stated he had been sued as an individual on an Association matter, and felt this was an unfair obligation. N. S. Mayo pointed out, "The establishment of a journal is a business proposition requiring a definite business organization," and noted that incorporation would be necessary to collect outstanding bills and the like. The Association voted for incorporation, and this was accomplished under the laws of Illinois in 1917.

The report of the Committee on Diseases featured a symposium on hog cholera, with presentations on the history of the disease by V. A. Moore; diagnosis by W. W. Dimock; etiology and control by C. M. Haring; dissemination and prevention by A. T. Kinsley; and preparation and use of serum by S. H. Gilliland. An extensive report of the foot-and-mouth disease outbreak of 1914–1915 and a paper on shipping fever of horses were presented by John R. Mohler. Abortion in cattle was discussed by Ward Giltner and E. T. Hallman.

In his report as chairman of the first Committee on History, D. Arthur Hughes noted:

At present the necessary historical materials are incomplete, scattered, inaccessible to the historical worker. The sense of importance of its historical materials has not been aroused in the profession. The profession knows that it is making progress; but very few persons know how great this progress is. The reason

for this is that no short history of veterinary progress has ever been written. Nor can it be until the sources of information can be reached. The inaccessibility of data is due to the fact that no provision has been made for assembling it in accredited archives.

It might be noted that at this time the Association had no library; although it had had a librarian for fifty years, the only function of this officer in late years had been as custodian of surplus copies of the *Proceedings*.

Dr. Hughes, who except for his untimely death the year following undoubtedly would have become the profession's first historian, recommended "that the office of historiographer and veterinary archivist be established by the association." And in urging that veterinary history be taught in the schools, he avers:

Men who, veterinarians though they may be, know nothing of veterinary history have not that constant manly pride in their profession begotten of an ever-present knowledge of its past accomplishments.

In speaking on "A Publicity Policy for the Profession," F. F. Sheets urged establishment of a bureau for:

placing fundamental veterinary truths before the public persistently, precluding the possibility of indifferent unprogressive men continuing to delude even part of the people as to what in reality constitutes the worth of modern veterinary services.

The present practice of the farm press, collecting annually twenty-five cents from Farmer Dupe of Squedunk Corners for the privilege of sending him innumerable pages of high priced advertising matter . . . is apparently inspired with the most philanthropic motives to supply the public with all kinds of commodities free. The paper cooperates by a free veterinary advice column sometimes venturing so far as to indorse the nostrums further guaranteed in the advertising section. . . . The resultant injury is twofold, the owner becomes the prey of the nostrum purveyor and the profession is afforded no ethical opportunity to justify itself.

R. A. Archibald was elected president; C. M. Haring, secretary; and F. H. Schneider, treasurer. Since 1865, one or both of

the latter posts had been filled by an incumbent.

On the matter of veterinarians being poor business men, in writing on "The Commercial Side of Veterinary Practice" in 1914, W. J. Martin states, "The man who is engaged in seeking a livelihood in this profession and does not give his full attention to his financial affairs is doomed to failure." He notes that while veterinarians are giving better and more rapid service than earlier, they were getting no more for their calls despite the fact that: "The actual purchasing price or value of an American dollar is just about one-half what it was 20 years ago." (A familiar note!) Martin is perhaps one of the first to openly admit that there is more to veterinary practice than the love of the profession:

Our profession is largely a commercial proposition, regardless of any other theory to the contrary. If an animal is not worth the expense of medical treatment, the owner will not spend any money therefore. Sentiment scarcely enters into the question. It is not so in human practice. . . . When the price of domestic animals falls below a point that they cease to be valuable to their owners, our compensation likewise falls.

It should not be supposed that Martin considered veterinary practice a purely commercial venture, however:

Every profession has its commercial as well as its ethical side to consider. . . . We cannot be ethical without being commercial, because it is the latter that largely supplies us with the common necessities of life. . . . It is high time that the old fee-bill or price-scale was revised, so that young men just entering the profession . . . might have some idea what to charge for their services.

Martin, undoubtedly, had in mind the common failing of recent graduates to charge fees on the college clinic basis, either unaware of economics — or in some cases, in a deliberate attempt to "corner the market."

### C. J. Marshall

Clarence James Marshall was born near Rome, Pennsylvania, March 13, 1864, and

graduated from the University of Pennsylvania in 1894, whereupon he became house surgeon, later an assistant to Leonard Pearson, and in 1909 Professor of Theory and Practice of his alma mater. Shortly after Dr. Pearson's death that year Dr. Marshall succeeded his late friend as State Veterinarian. Active in local, state, and national association work, he served as AVMA secretary (1910–1913), and in 1913 was elected AVMA president — the last man (except for one during World War II) to serve two terms in this office.

In 1916 he went to Europe to study the organization of the military veterinary service of the French and British armies, and in 1917 was charged with drawing plans for the newly established Veterinary Corps. Commissioned a major, he was appointed assistant director of the Corps, promoted to lieutenant colonel, and served to 1919. At the time of his death on October 29, 1938, he had been a member of the teaching staff of the University of Pennsylvania for 42 years.

### The Fair Sex

In 1915 D. M. Campbell noted:

Women may be said to have invaded the veterinary profession, there being now in the United States four women who are graduate veterinary practitioners. . . . In at least one veterinary college (McKillop) four women have enrolled this year in the freshman class with the expressed intention of qualifying for municipal food inspection and perhaps other sanitary work. . . . Because of the novelty of the enrollment of girls at a veterinary college, at least three magazine writers have already interviewed these students with the intention of writing up the opportunity the veterinary profession offers to women. . . . May we soon expect to see the advertisements of a number of our veterinary colleges in the ladies' magazines? . . . We withhold predictions as to the success that women may achieve in veterinary work or to the effect that they may have on the male members of the profession or the colleges they attend.

On the subject of women in veterinary medicine, Dr. Helen Richt (Kansas State, 1932) observed that in 1932 more than 25

per cent of students at the Royal Veterinary College of London were women:

a post-war development in England, and we judge from comment in British veterinary publications . . . an unwelcome one to the veterinary profession in that country. . . . Although there is a place for women in veterinary medicine [in the United States], and probably will be an even better field in the future, no woman should take up this profession, unless she is adapted and fitted to surmount the difficulties common to pioneering.

That Dr. Richt (Irwin) found her place in the veterinary profession is indicated by the fact that she served as the first woman veterinarian to hold an official AVMA office, that of secretary of the Section on Small Animals at the 1937 convention.

In 1938, a prominent veterinarian, upon receipt of an inquiry concerning the prospects for women in veterinary medicine from the daughter of a physician, observes:

it is difficult indeed to lend encouragement to any member of the weaker sex that would cause her to aim at admission to any veterinary school. The deans of most of the schools or the admission boards prefer to keep women out of their respective schools because it costs money to send any person through veterinary schools and the chances are not very good that a personable young woman would continue throughout her life in the profession of her choosing. Then too, she might keep some young man from entering who would diligently practice veterinary medicine all his productive life.

## 1916

At the 1916 meeting in Detroit, President R. A. Archibald noted some of the major achievements of the year: acquisition of the *American Veterinary Review* as the official organ of the Association; passage of the long-sought-for Army bill; and eradication of the outbreak of foot-and-mouth disease. And concerning matters of immediate importance to the Association, "the first problem that strikes us most forcibly is that of reorganization." Among the points to be considered, Dr. Archibald suggested affiliation of state associations with the AVMA, provision for president-

elect, a full-time secretary, and a managing editor for the *Journal*.

As chairman of the Committee on Diseases, John R. Mohler noted an increased prevalence of hemorrhagic septicemia, due in part to the time and effort of the BAI being diverted to the foot-and-mouth disease outbreak. Swamp fever of horses and infectious abortion of cattle were recognized as problems requiring greater attention. A notable feature of the meeting was a symposium on brucellosis, with papers being presented by W. L. Williams, J. F. DeVine, C. E. Cotton, F. B. Hadley, Ward Giltner, and Adolph Eichhorn. That knowledge of the problem was inadequate was recognized, and sanitation was considered the only universally acceptable practice relative to control of the disease.

Hog cholera was discussed by R. R. Birch and Robert Graham, shipping fever by J. R. Mohler and G. B. McKillip, local anesthesia in dentistry by H. E. Bemis, tuberculin testing by G. H. Hart and Jacob Traum, experimental physiology by H. D. Bergman, and business methods in veterinary practice by D. M. Campbell. The report of James Law, chairman of the Committee on History, consisted of a seventy page "Recent History of Veterinary Medicine," dealing chiefly with the great animal plagues since 1870.

A decision to restrict publication of papers and committee reports presented at the meetings to the *Journal* was deplored by D. M. Campbell; *Veterinary Medicine* carried a comprehensive report of the Detroit meeting only a week after the meeting ended. A primary purpose in acquiring the *Review* had been as a vehicle for the proceedings of the meetings, and for several years, Merillat and Campbell note, "it was little more than an installment publication of the proceedings of the A.V.M.A., in lieu of the annual bound volumes." It might be noted, however, that while the new *Journal* carried some 600 pages of Association matters and papers its first year (1916), considerably more of the remaining 1,100 pages was devoted to scientific subjects than had been

the case with the *Review* in its declining years.

A major change in AVMA reorganization was the provision for election of members of the Executive Board by districts; by gentlemen's agreement the five vice presidents had been elected on a regional basis, and voids in representation could be filled by discretion of the president, who appointed six members. But in 1906, for example, there was no one in the official family who resided west of Chicago. Continuity on the board was also provided for by election for five-year terms on a rotating basis. In three successive years (1910–1912), 34 men had served one year each; one secretary served two years; and only the treasurer and librarian served all three years.

In noting that America had about 20,000 veterinarians, N. S. Mayo suggests:

America is now fairly well supplied with veterinarians. The demand is not for more veterinarians, but for veterinarians with a more thorough training, not only in strictly professional lines, but in related lines, which will make them not only more efficient as professional men but more useful to society at large.

C. E. Cotton was elected president, and L. A. Merillat, secretary. F. H. Schneider was re-elected treasurer.

### R. A. Archibald

Robert A. Archibald was born in Ireland in 1870, came to the United States in 1887, and graduated from the Chicago Veterinary College in 1891, following which he is said to have started practice in California on \$20 borrowed from a colleague. In 1899 he became city veterinarian and assistant bacteriologist for the city of Oakland, Professor of Bacteriology in the Oakland College of Medicine in 1908, and the same concurrently in the San Francisco Veterinary College in 1909.

Active in association work, Dr. Archibald was three times president of the California VMA, member and president of the state examining board, and twice an AVMA vice president before being elected president in 1915. He is credited with being the first to advocate reorganization of the AVMA

along lines that would make it a truly national body. He died on March 14, 1922.

### 1917

At the meeting for 1917 in Kansas City, President C. E. Cotton noted that despite considerable improvement in recent years, numbers of graduates were being turned down by various examining boards, and observed:

The time of the horse doctor has passed. The old plaintive argument that the country needs practitioners and that we wish to give the poor uneducated country boy a chance to enter the profession in order to meet the crying needs of the farming communities, has become threadbare and stale. All the other professions have closed their doors to this standard of preparation. There is now no reason why this young man cannot obtain the preliminary education, provided he is made of the right kind of stuff. . . . The practitioner of veterinary medicine must be a man of broad knowledge and thoroughly trained in his technical subjects. This necessitates his obtaining a general as well as a technical education. . . . The standard of the profession is not judged by the leaders but by the general average of those holding a veterinary degree.

Dr. Cotton noted that while medicine required two years of college preparatory work, the most exacted by any veterinary school was a high school diploma; others had only an entrance examination that "an immature child in the sixth grade" could pass. Impatient with the reluctance of some members of the Association to press for higher standards, he urged early action on a requirement of high school graduation and a four-year course of nine months each year.

In 1911 the Association had approved "matriculation requirements equivalent to those for admission to recognized high schools"; in 1914, one year of high school and three collegiate years of six months each; and in 1915, a four-year veterinary course of at least twenty-eight months. Colleges which had adopted high school graduation as a requirement had experienced a drop in admissions, but in a few years attendance had increased beyond previous levels.

Tuberculosis was a principal topic for discussion, with papers being presented by S. H. Ward, C. J. Marshall, Jacob Traum, C. H. Higgins and M. H. Reynolds. J. R. Mohler reported on vesicular stomatitis, and on regulation of veterinary biological products. Among other papers were those by C. H. Stange on hog cholera; Adolph Eichhorn on blackleg; Robert Graham on forage poisoning; Joseph Hughes on median neurectomy; and W. L. Williams on abortion. Digestive disorders in cattle were discussed by D. H. Udall, and in horses by J. F. DeVine. One session was devoted to a symposium on animal parasitism with Seymour Hadwen, C. P. Fitch, B. F. Kaupp, and L. Enos Day, among others, participating.

A paper of some novelty was "The Principles of Osteopathy as Applied in the Treatment of Veterinary Patients," by E. A. A. Grange. Apparently with some reservations, he reported:

The literature of the science describes many cases in which the line of treatment had a beneficial effect in small animals, but nothing has been done, as far as I am aware, by way of experiment or treatment in horses or cattle.

The clinic, which along with the meetings was held at the Kansas City Veterinary College, featured the surgical treatment for sterility by W. L. Williams; teat surgery by T. H. Ferguson; molar extraction under local anesthesia by H. E. Bemis and L. A. Merrillat; and operations for roaring by J. W. Adams; hernia by G. B. McKillip; and fistula by H. E. Bemis.

As secretary, L. A. Merrillat charged:

fewer than ten per cent of the veterinarians of this country support the organization that created and now maintains a profession for them to exploit and enjoy. . . . Obviously the veterinarian . . . having found prosperity without effort, has never thought of drafting plans for self-preservation, and is today the victim of his own indifference.

The first Executive Board, elected under the recently adopted reorganization of the Association, included V. A. Moore, Fred Torrance, W. H. Hoskins, C. H. Stange,

J. R. Mohler, and R. A. Archibald. Dr. Torrance was elected president, L. A. Merrillat was re-elected secretary, but resigned shortly to enter military service and was replaced by L. E. Day.

### Standard of the Profession

An inkling of what barred numbers of graduates from practice in some states may be had from a composite of questions from state board examinations for 1916. The compiler notes:

Very recently the examinations have come to deal more and more with questions pertaining to animals other than the horse and with questions of sanitation, quarantine, the handling of contagious diseases, etc.

### Anatomy:

Describe the humerus, fetlock joint, small mesenteric artery, deep flexor of the phalanges, foramen ovale, thoracic duct, sensitive laminae. Name divisions of digestive tract in horse, pig, ox and describe differences. Describe distribution and function of fifth cranial nerve. Name and locate openings of pharynx.

### Theory and practice:

Give etiology, pathogenesis, symptoms, complications, course, differential diagnosis and treatment of: influenza, pleuritis, hemorrhagic septicemia, hog cholera, tetanus, tuberculosis, pharyngitis. Write a prescription for: general tonic, chorea following distemper, garget in cow. Give action, uses and dose of digitalis for horse, cow, dog. Give indications and antidote for chloral.

### Pathology:

Define: hemorrhage, petechiae, ecchymosis, aneurism, embolus. Describe lesions of: hog cholera, blackleg, glanders. Give diagnosis for: glanders, rabies, anthrax. Describe preparation of tissue specimen for laboratory bacteriological examination. Classify pathogenic bacteria. Name four parasitic diseases of sheep. Give life cycle *Taeniae coenurus*, *Ascaris megaloccephala*.

### Surgery:

Describe: amputation of penis, wound healing and treatment, trephining for upper sixth molar, castration of horse, reduction of simple leg fracture in horse, tenotomy for spavin lameness, relief of tympanites in horse and cow. paracentesis thoracis, cryptorchid operation,

inguinal hernia repair. Give treatment for fistulous tracts, suppurating nail puncture, chronic navicular disease.

### *Obstetrics:*

Give gestation period for mare, cow, bitch, ewe, sow. Define dystocia, presentation, premature birth, abortion, estrus. Give cause, symptoms and treatment for: nymphomania, parturient apoplexy, mammitis, perforate urachus. Give method of handling for: breech presentation in mare, reduction of prolapsed uterus in cow, dystocia from ascites, hydrocephalus. Give causes and treatment of abortion.

### *Clinical diagnosis:*

What is diagnosis? What information is required for a diagnosis? What is the tuberculin test, mallein test? Give symptoms of excessive hemorrhage. Distinguish between arterial and venous hemorrhage. Define fever. Give symptoms and sequellae of influenza.

### *Physiology:*

Explain: action of heart, ruminant digestion, animal heat, functions of gallbladder in horse [!], physiology of respiration. Name and give location of two nervous systems. [?] Give names and actions of digestive secretions. Give pulse, respiration, temperature of horse, ox, dog, sheep, pig. Distinguish between serum, plasma, lymph. Give normal components, abnormal constituents, tests for urine.

### *Chemistry:*

Define chemistry, analysis, synthesis, molecule, atom. Give symbol and atomic weight for antimony, calcium, iron, phosphorus, sulphur. Define Avogadro's law in relation to volumes of gases. Describe Marsh test for arsenic. Give specific gravity of horse and ox urine and method for estimation of total solids. Give test for sugar, hemoglobin, albumen in urine. Describe Babcock test, test for formaldehyde in milk.

### **C. E. Cotton**

Charles E. Cotton was born in Prescott, Wisconsin, September 18, 1871, and received his veterinary degree from the University of Pennsylvania in 1893. He was one of the pioneers in tuberculosis eradication, and became active in a variety of professional and livestock affairs, being influential in the programs and policies of

the livestock sanitary organizations of the country for many years.

Dr. Cotton was elected president of the Minnesota Society (1909), the AVMA (1916), and the USLSA (1936). In World War I, he was commissioned a Major (1917), and served as a general veterinary inspector of the Veterinary Corps until his discharge in 1919. In 1948 he became an Honor Roll member of the Association, and in 1952 was awarded the Twelfth International Veterinary Congress prize for outstanding service to the veterinary profession. He died at the age of 82 on April 21, 1954.

### **1918**

The annual meeting for 1918 was held in Philadelphia. Noting: "The war found our profession in America unprepared," President Fred Torrance observed:

War has demonstrated the value of the veterinary profession to the nation and increased its importance as a necessary cog in the machinery of modern life. . . . The demand for well educated veterinarians, not only for war, but to care for the enormously valuable livestock of the country, now and hereafter, will increase the attendance at our veterinary colleges, will render it easier for these to obtain the financial support necessary to their success, and render possible a high standard of education and efficiency.

The program featured a "war session," with papers by Majors J. P. Turner and L. A. Klein, and by J. R. Mohler and A. H. Baker. A symposium on contagious diseases included papers on various aspects of the abortion problem by C. P. Fitch, J. F. DeVine, Ward Giltner and E. T. Hallman. Swine practice was discussed by C. C. McLean, W. W. Dimock, and T. H. Ferguson. Parasitological problems were presented by M. C. Hall, Seymour Hadwen, and E. L. Quitman.

The deaths of past-presidents A. Liantard, A. D. Melvin, and Sesco Stewart were noted. Dr. Melvin's portrait, along with those of D. E. Salmon, his predecessor, and J. R. Mohler, his successor as BAI chief, were exhibited along with those of James Law and Leonard Pearson. These had

been painted for the art gallery of the Saddle and Sirloin Club of Chicago. In addition to the well-known achievements of these men, all past-presidents of the AVMA, it is of interest to note their academic relationships: Mohler was a student under Pearson, who in turn had studied under Law, who also was the preceptor of Salmon, whose protégé Melvin was.

Later, in presenting the portraits to the Club, V. A. Moore (successor to Law) noted:

We cannot at this time measure the value to humanity of the work and influence of these truly great and good men. They will stimulate others to greater effort for all time because they possessed the master words of success — character and work. Their labors have extended over a period of fifty years, the most prodigious period of change the world has ever known . . . wherein are written our knowledge of animal diseases, the progress in American veterinary education and the history of our animal industry.

These portraits were lost in the disastrous stockyards fire in 1934.

About 1,000 new members were admitted to the Association, including many from the BAI and the Veterinary Corps. V. A. Moore was elected president; N. S. Mayo, secretary; and M. Jacob, treasurer. P. A. Fish resigned as editor of the AVMA *Journal* to enter military service, and W. H. Dalrymple was appointed to this post. However, because of failing health, Dr. Dalrymple gave up this position the following year, and J. R. Mohler assumed the editorship.

At a luncheon meeting the previous year, a group of women formed the Women's Auxiliary to the AVMA. The meeting was presided over by Mrs. A. T. Kinsley, and the first officers were as follows: president, Mrs. W. H. Hoskins; corresponding secretary, Mrs. Ashe Lockhart; recording secretary, Mrs. C. E. Cotton; and treasurer, Mrs. Hans Jensen. In 1918 a constitution and by-laws were adopted, which specified the object as:

to give necessary financial assistance to the family of any veterinarian engaged in war work

if his life has been forfeited in pursuance of such work, or if he has been temporarily or permanently disabled.

In 1920, the present auxiliary Loan Fund was established, in part from monies collected for the initial objective. In 40 years, the original group of about 55 members increased to more than 6,000.

### F. Torrance

Fred Torrance was born at Montreal, July 13, 1859, and attended McGill University, where he received the B.A. and D.V.S. degrees, the latter in 1882. He located in a pioneer practice at Brandon, Manitoba, and in 1892 moved to Winnipeg, where he became well known in the veterinary profession. In 1912 he was appointed Veterinary Director General for the Dominion of Canada, continuing in this capacity until 1923, when he became professor of physiology and hygiene at the Ontario school.

Under his leadership, dourine was eradicated from the western provinces, and glanders was practically eliminated. Other major campaigns were those against mange and tuberculosis in cattle, and hog cholera, the latter by elimination of raw garbage feeding. A man of great personal warmth, it was said of him while at Ontario, "he endeared himself to the students," and to the staff he was "a staunch friend and able colleague."

Dr. Torrance served as president of the Manitoba Association, honorary president of the Ontario Association, twice vice president of the AVMA (1900, 1913), and was elected AVMA president in 1917. He died on June 29, 1924.

### The Women

The following short history of the AVMA Women's Auxiliary was written by Mrs. E. R. Walker, and appeared in the *Journal* in 1958.

*A Short History of the AVMA Women's Auxiliary.*—On Aug. 22, 1917, a group of women met for luncheon at the Kansas City Veterinary College, Kansas City, Mo., to organ-

ize the Women's Auxiliary to the AVMA. Mrs. A. T. Kinsley, Kansas City, Mo., presided at the business meeting. The following officers were elected: Mrs. W. Horace Hoskins, Philadelphia, president; Mrs. Ashe Lockhart, Kansas City, Mo., corresponding secretary; Mrs. Hans Jensen, Kansas City, Mo., treasurer.

The original purpose of the organization was to aid the families of veterinarians whose welfare had been disrupted by World War I.

The 1920 national meeting marked an important development in the auxiliary history because the present-day auxiliary Loan Fund was founded.

A big step in the structural life of our Auxiliary was in 1930, when a move to encourage the state auxiliaries to become chapters of the AVMA Auxiliary was begun. These form our present-day House of Representatives.

A pamphlet, "What the Veterinary Profession Means to the Public," was sponsored by the AVMA Auxiliary in 1945. Through this pamphlet, the public was greatly enlightened and the membership in the auxiliary was doubled.

In 1946, it became possible for any auxiliary to an AVMA student chapter to become an affiliate of the Women's Auxiliary.

The AVMA Auxiliary annual achievement award of \$25, made to the outstanding senior student in each accredited veterinary school, was originated in 1948.

Since 1952, the Women's Auxiliary has encouraged state and local auxiliaries to contribute to the AVMA Research Fund in support of the AVMA Research Fellowship Program. Under this program, carefully selected young veterinarians with an aptitude for research are awarded fellowships to carry out specific projects at approved educational institutions.

In 1953, charter members were automatically made life members.

The Memorial Fund, made up from contributions given in memory of deceased veterinarians or members of their families, and gift legacies, originated in 1954.

In the period from August, 1917, to July, 1957, the membership of the women's auxiliary of the AVMA has shown tremendous growth, increasing from a small group of 55 members to 6,285 active members.

## 1919

In his presidential address at the 1919 meeting in New Orleans, V. A. Moore acknowledges:

the existence of a false conception of professional authority. . . . Numerous appeals have

come to defend the rights of veterinarians . . . [but] I do not find that practitioners are vested with it [authority] when their professional function is considered alone. . . . In the true sense, veterinarians are the servants of animal owners. According to the tenets of our ethics, they can serve only when requested to do so and, by the property rights, they have no other alternative.

There is a delicacy in this situation that members sometimes overlook. The sense of being a servant is often humiliating, but never so when considered in a true, professional spirit. . . . I am bold enough in the faith I have in the future possibilities and usefulness of veterinarians, to believe that the time will come soon when they will command sufficiently the confidence of men in other occupations to enable them to perform fully the mission of their calling. It is this principle, rather than vested authority, that gives them the dignity of professional men.

Several of the section meetings were devoted to a single topic: two general sessions were devoted to the Army Veterinary Service, and one to diseases in the South; infectious equine anemia was the topic for one session on sanitary science. C. J. Marshall reported 31 deaths from malignant catarrhal fever on one farm in Pennsylvania, and although this disease was considered something of a rarity:

The disease may be more prevalent than is generally supposed. A diagnosis in this case would have been overlooked if the disease had occurred in a small herd with but few deaths.

As a matter of passing interest, W. H. Hoskins noted:

When the Volstead prohibition bill reached conference it was discovered that a provision permitting the veterinarian to prescribe liquors under like conditions as the physician had been omitted . . . [but] we were assured . . . the omission was not intentional.

Later, in response to an inquiry by N. S. Mayo, the Bureau of Internal Revenue ruled:

you are informed that veterinarians may not prescribe intoxicating liquors for internal use for their animal patients. . . . [This] is limited to duly qualified physicians for persons

only. Not to exceed 6 quarts of alcohol may therefore be obtained by any veterinarian during any calendar year.

With dry humor the *Journal* notes: "The announcement that the law does not permit the prescribing of alcoholic liquors for animals will be sad news to many stable attendants."

In urging veterinarians to become proficient in sheep practice, the irrepressible E. T. Baker accuses his colleagues, when called to attend sheep, of taking the attitude: "I don't know much about sheep, and I really do not know what is the matter with them." The farmer thereupon calls the county agent, who has read a book on sheep, and:

At last he had found an expert . . . the county agent has gained his confidence; also, the veterinarian has lost it. . . . The veterinarian has lost the sheep practice in that community; not much, to be sure; but ten years ago how many of you ever dreamed that swine practice would be the money-maker of today?

Others had attempted to interest the veterinarian in sheep practice; in 1915 the *Cornell Veterinarian* had devoted an entire issue to sheep problems.

C. A. Cary was elected president; N. S. Mayo was re-elected secretary, and — as was

to be the case until 1943 — M. Jacob was re-elected treasurer.

#### V. A. Moore

Veranus Alva Moore was born in Houndsfield, New York, April 13, 1859, and received his B.S. from Cornell (1887), M.D. from George Washington University (1890), an honorary veterinary degree from the University of Pennsylvania (1911), and a D.Sc. from Syracuse University in 1919. From 1890–1896 he was with the BAI, succeeding Theobald Smith as chief of the Pathological Division in 1895. In 1896, as Professor of Veterinary Pathology, Bacteriology and Meat Inspection, he became a member of the first faculty in veterinary medicine at Cornell. In 1908 he succeeded James Law as dean, and remained in both capacities until his retirement in 1929.

Dr. Moore joined the AVMA in 1901, was four times a vice president, first chairman of the Executive Board (1916), and was elected president in 1918. He was an authority on tuberculosis, serving on the International Tuberculosis Commission, and co-authored with W. A. Hagan a textbook of *General and Pathogenic Bacteriology and Immunity* (1925). One of his two sons became a veterinarian, Ervin V. Moore (Cornell, 1917). Dr. Moore died at Ithaca, February 11, 1931.