What's Past Is Prologue

As the American veterinary profession stands upon the threshold of its second century of service, it might well cast a glance in two directions: to view prospects for the future, and to pay due homage to the past. As in any other pursuit of mankind, our veterinary heritage comprises moments of greatness interspersed among a greater profusion of more ordinary events - some so commonplace they seem not to have been events at all. But not only does the past illuminate the present, in a sense it is the present – for the present is not created daily with the sunrise, but is a distillation of the past. And that "what's past is prologue" should come as no surprise, for whether by overt action or by default, we are shaping our tomorrow day by day, and in the accelerated pace of the present, what is today soon becomes another fact of history.

It would augur well, then, to give occasional pause to view our prospects for tomorrow by the reflected — and sometimes flickering — light of what has gone before. More than this, it would be well to cast the searching light of careful inquiry backward as well as forward, not fearful of finding the skeleton of a horse doctor in the medicine chest, for it is only by a full awareness of yesterday's shortcomings as well as successes that we can avoid repeating our mistakes tomorrow.

The founding forty of the United States Veterinary Medical Association had no assurance that the foundling they endowed with pride of ancestry would become a power outside its then-narrow confines – or even survive. But even a superficial reading of the document formalizing their action would indicate that this was no hastily-conceived instrumentality, for many of the concepts stated or implied in the original Constitution and Bylaws are as valid today as they were a century ago. But while their action gives us a convenient means for dating the organized profession of this country, it is evident that they did not create the American veterinary profession de novo – nor would any of the USVMA founders have claimed they

What is surprising, considering the obstacles to effective action imposed by both external and internal forces, is that the organized veterinary profession — which was barely able to sustain its own numbers for a long period — did survive. From the vantage point of temporal distance it should be possible to assess some of the factors responsible for the vicissitudes as well as the vitality of the budding profession. That so few individuals have given serious attention to the chronicling of American veterinary history may be considered as mute evidence that all too little

thought has been given to our heritage. And without an adequate backlog of historical publications based on careful research, it would be presumptuous for one person to draw sweeping conclusions, especially from his own work. In the long run it is up to each individual to determine for himself what significance a recital of fact may have.

AXIOMS OF HISTORY

In the course of several years of research and writing, however, there have emerged a number of truisms relating to our earlier history which subsequent events have proved significant, so significant that they may be considered axiomatic. The most inescapable of these are: that whenever man and animals coexist there will be problems of a veterinary nature; that if these needs do not receive professional attention they foster unprofessional attendance; and that a prolonged period of neglect cannot be atoned for solely by the issuing of diplomas or edicts, however well backed they may be by good intentions.

That the veterinary art should have been so long neglected, and that its full potential for benefit to the public is not yet realized, should not be particularly surprising. Of the several medical sciences, it is quite logical that human medicine should have been the first to be developed to a high degree. Yet many people continue to spend more money for fake cancer cures and the like than for the best medicine has to offer. despite an adequate indoctrination based on the observable and publicized accomplishments of the medical profession. And although some aspects of veterinary medicine - in most cases the least evident have more impact upon society than some facets of medicine, the veterinary art by its very nature lacks the immediacy of relationship to persons that medicine – by its nature - has, i.e., obvious self-interest.

What has not been made sufficiently apparent is the nature and scope of the stake the ordinary citizen has in veterinary

medicine. It is not too far-fetched to suggest that the physician Osler, whose name is still most revered in clinical medicine. probably saved fewer lives than did countless veterinary inspectors of his time who made our meat and milk supply fit for human consumption. Nor is it unreasonable to expect that an individual would be personally grateful to the physician who saves his life, even though principal credit should at times go to the frequently nameless researcher who put the necessary tools in the physician's hand. Medical historians, however, have fairly adequately chronicled these discoveries, along with their applications by clinicians.

IMAGE OF THE PROFESSION

From a review of our veterinary heritage it is evident that there have been many men whose names have been household words within the veterinary profession - for a time - but whose contributions have been allowed to escape from notice. The same is true of the many discoveries by men who achieved but lesser notice during their lifetimes and have been all but forgotten. And equally apparent is the fact that the work of the practitioner – always the backbone of the profession - in preserving our animal industry from utter destruction, both by his performance of day-to-day routine duties and in times of imminent disaster, is little appreciated. Nor has much been said about the sociologic impact of small animal medicine.

All these—and more—redound to the credit of the veterinary profession, and to the benefit of society. These are matters in which we can and should take justifiable pride and satisfaction. Except as our accumulated experience can be demonstrated to have a direct bearing upon the economy of livestock operations, however, the individual practitioner is constrained by the same mores concerning his abilities as is the physician. A major difference, during the past half century at least, has been that the physician has had a silent part-

ner – the medical historian – who, by making the achievements of medicine public domain, has contributed immeasurably to the image of the physician.

In considering the image of the veterinary profession during the past century, it is evident that without adequate documentation of our achievements, all too often it has been the sensational and unfavorable notices that have reached public consciousness via the newspapers and farm journals. Without the broader picture only the historian can provide in easily assimilated form, it has been this succession of inadequately refuted exaggerations and half truths that has been accepted as fact. The public – all too many of whom still equate the veterinarian of today with the horse doctor of the late nineteenth century - are completely unaware of the fact that it was during this very same period that veterinarians of the Bureau of Animal Industry wrote a chapter of veterinary and medical achievement unmatched in the history of mankind. It is something of a paradox that the public has forgotten that the general run of physicians of that same time was hardly - if at all - better qualified to practice than was the general run of veterinarians. Still more paradoxical is the fact that perhaps most veterinarians have been as unaware of this golden age of veterinary medicine as the unsuspecting public.

Obviously, then, if our own history teaches us anything, it is that we should learn more of our history — that our heritage has significance not only to ourselves but to everyone. In particular, it is essential we appreciate that what we do not learn we are destined to repeat without realizing it. Perhaps the principal lesson is that the veterinary profession is best served when it renders maximum service to an informed public.

A LOOK AT THE RECORD

It behooves us, therefore, to take stock of our accomplishments, to keep a record of them before us, and to use this record as one basis for professional development. An adequately documented history might be thought of more or less in the same light as the pedigree of a fine animal: having a certificate of ancestry in hand does not alter one's background, but it does open the record for all to see. And although at any given moment, present performance is of primary importance, being able to point to a record of past achievement gives added assurance of continued productivity.

What, then, have been some of the more significant developments within the veterinary profession during the past century? And of equal importance — perhaps more so in utilizing the record of the past as a guide to future growth — what were the basic factors responsible for these developments? Undoubtedly the prime factor has been the men of veterinary medicine, idealistic men dedicated to the rendering of selfless public service in matters related to the health of domestic animals.

A century ago, when the entire veterinary profession of the country could have assembled in one room - and a considerable part of it did on that fateful day in June, 1863 – there were three of this small band already marked for greatness: Alexandre Liautard in education and journalism; E. T. Thayer in regulatory veterinary medicine; and I. Michener as the epitome of the progressive practitioner. Not long afterward, James Law of Cornell entered the scene, to be followed before the turn of the century by such men as R. S. Huidekoper, W. H. Hoskins, and Leonard Pearson of Pennsylvania, and - a man for the ages - D. E. Salmon, first Chief of the Bureau of Animal Industry. Add to these W. L. Williams of Indiana and Cornell, and two other stalwarts of the BAI, Fred L. Kilborne and Cooper Curtice, and we have an even dozen of the men who played major roles in establishing the veterinary profession as a vital force prior to 1900. There were others, of course.

If we were to name but one change more responsible than any other in securing for the enlarging veterinary profession its rightful place in the affairs of man, it could hardly be doubted that this has been in the area of education. Beginning with Smith and McEachrean in Canada, and

Law and Liautard in the United States, the aggregate activities of all those men engaged in teaching and research have been the foundation of all permanent improvements in the veterinary domain. But education, nurtured by research, would avail but little unless the preparation of mind and hand were employed in the service of man. In the long run it has been the combined labors of the well trained and hard working - but little recognized - body of practitioners whose efforts have brought the fruits of veterinary medicine to the people. As with the other professions, it would be difficult to measure the achievements of the practitioner whose work may frequently be significant but is rarely spectacular.

There is one group of veterinarians – the men of the BAI – deserving of more than passing tribute. From the beginnings of the Bureau in 1884, it was this small band of dedicated men who in two short decades under their remarkable chief, D. E. Salmon, literally saved the American livestock industry from virtual extinction. Underpaid, overworked, little recognized, and facing formidable odds ranging at times from mere public apathy to overt opposition, these men compiled an amazing record of solid achievement never before, and - under such circumstances - not since duplicated. As detailed elsewhere, the record left by veterinarians of the Bureau, including those who labored under the leadership of A. D. Melvin, J. R. Mohler, and their successors, is worthy of continuing study and broader appreciation. The tradition they established is being carried on under the aegis of the Agricultural Research Service.

Military veterinary medicine, with a heritage extending back to pre-Revolutionary times, came of age only belatedly during World War I, but rapidly established itself as an essential force in national security, both present and future. During two major wars it is probably no exaggeration to say that few groups so small in numbers had responsibilities approaching the scope of those delegated to the Veterinary Corps. Always at the forefront in peace as well as

war, Army and Air Force veterinarians presently are engaged in space medicine and radiation biology in addition to other activities, not the least important of which is their basic function in food hygiene.

Small animal medicine, also a late comer, has become synonymous with all that is progressive in the application of advanced medical and surgical technics to pet animals, and - without laying claim to it has indirectly become a socio-economic force of considerable magnitude. With medical research becoming more animaloriented, laboratory animal medicine has developed rapidly as an outlet for specialized service by veterinarians. Coupled with expansion of animal disease research, the demand for veterinarians with either broad or specialized training in the entire spectrum of the medical sciences has continued to outstrip the supply.

Public health work, which as such has been recognized as an outlet for a limited number of veterinarians since the late nineteenth century, has in recent years become an expanded sphere, especially for the veterinarian with graduate level training in public health. Much of the daily work of practitioners in all fields of the profession, however, has always had a closer identification with the public health than has been generally recognized. It should be recalled that it was the BAI veterinarians Kilborne and Curtice, along with others such as Mark Francis of Texas, who did much to elucidate the problem of arthropod vectors of disease through their work on Texas fever, and who thus laid the groundwork for the conquest of yellow fever and the building of the Panama Canal. Maurice Hall discovered a remedy for hookworm, and the Stader splint revolutionized fracture repair. But while these contributions are among the more spectacular which are directly related to human welfare, they are but a few of many. When it is considered that there are some 200 diseases communicable between man and animals, control measures for many of which have resulted from veterinary research - and which are carried out daily by veterinarians - the relationship of veterinary medicine to public health becomes obvious. Unconsidered, however, the relationship may tend to be obscured.

A GLIMPSE OF THE FUTURE

What portents are there for the future? The safest estimate would be that the status of veterinary medicine can be - indeed will be - what we determine it shall be. How far we shall go and how fast is largely up to us, although it would be unrealistic to speculate over the exact shape of things to come in the far distant future. The basis for predicting the present state of the veterinary profession existed twentyfive years ago, but it may be doubted that many, even of the most optimistic prognosticators, would have envisioned the present state of the veterinary profession as a fait accompli. Today we are in a better position than ever before to believe and make use of the truism that "what's past is prologue." To a greater extent than ever before, thinking men are giving careful consideration - based to a degree on the immediate past – to the future, your future and mine. What is most encouraging is the fact that more and more attention is being given, not to "what's in it for me," but to "how can we best serve mankind."

We need establish but one qualification if we are to make a reasonable estimate of the status of the veterinary profession, say twenty-five years from now. It is as simple as this: that we make our plans on the basis of rendering the maximum of service to man. We have the means today - manpower, money, and the mind to do it for accomplishing goals undreamed of twenty-five years ago. The most fundamental of these will be to insure an adequate food supply for the ill-fed millions all over the globe, not excluding those within our own boundaries. Almost everywhere there is a protein shortage that can be alleviated best through optimal attention to animal husbandry, and this end can be served best only by proper attention to the veterinary aspects of animal production. From the lessons of the past

it is evident that if we do not serve in this capacity, others will. The enviable record already made by numbers of veterinarians, both civilian and military, in this area would seem to be a fair guarantee that we will do more.

To accomplish this – as only one of a number of tasks ahead of us - will require not merely greater numbers of veterinarians, but more men trained in more skills, educated in broader concepts, oriented to more efficient use of that most precious of commodities - time. A number of the schools have already indicated an awareness of these essentials by executing or laying the groundwork for sweeping revisions of the traditional concept of professional education. Most of the schools have the physical plants to implement these changes of concept; the problem of attracting adequate numbers of competent staff and students is receiving attention long overdue.

With the rapidly increasing emphasis upon promoting public awareness of the role of veterinary medicine in the affairs of man, it seems likely that the problem of recruitment of more and better qualified students will have been solved within a relatively short time. And within a few more years, many of these students—attracted by the increasingly favorable climate for the teacher and investigator—will be ready to wipe out the present shortage of qualified educators and researchers.

The upsurge in construction of hospital facilities equal in many respects to those in human medicine is one of the more hopeful signs that the status of the veterinary profession will continue to rise in the public estimation. This is not a superficial development, but one based upon the sound foundation of increased technical excellence and the experience of those who — not so long ago — pioneered in small animal practice. In fact, many of the benefits of advanced hospitalization technics have been extended to large animal medicine, e.g., equine practice, where the

dividual animal has considerable value. To a large extent, the rapid development of small animal medicine has also accelerated the emergence of laboratory animal medicine as a specialty, for it has been the demonstration of technics comparable to those of medical practice that has called favorable attention to the contributions veterinary medicine can make in practically all areas of medical research. Nor should the veterinary aspects of research in production be underestimated, animal something which the lunatic fringe of antivivisectionists conveniently forget if, indeed, they have had it called to their attention. Incredible as it may seem in this supposedly enlightened society, the antivivisection problem will probably become worse before it becomes better.

Large animal practice undoubtedly will become keyed more and more - as it already has in many areas - to the involvement of the veterinarian in management. Not that the practitioner will discard his boots and obstetrical sleeve altogether for a business suit, but that as the exponent of herd health, he will become increasingly involved as a partner in profits to the producer. His primary service will be in furthering productivity by preventing trouble, but fire engine practice as such will not be entirely a thing of the past. In particular, with the increasing value of individual animals, there will still be emergencies to make demands upon his hands - hands even more skilful than today. But it seems unlikely that the same hands that pull calves valued in four or five figures, or repair injured teats on cows with a potential lifetime production of a quarter million pounds of milk, will also be doing much castrating and dehorning, or even much routine vaccinating.

CONTINUUM

A major change, one of increasing tempo rather than purely an innovation, will be more adequate provision for lifetime education of the practitioner. Today's short courses, conferences, conventions, text-

books, and journals are, by comparison with what future promise holds, horribly inefficient both in terms of time and money spent for value received. With the ready availability of films, slides, taped lectures, teaching machines, televised demonstrations, and the like, these technics will probably supplant most of the meetings of today - which differ from those of yesterday in little more than size and number. Meetings will continue to be held, but these will become more and more restricted to intimate conferences and those of specialty groups for informal discussion of matters of mutual interest, with the purely instructional matter being relegated to more convenient and continuous scheduling at home. The social value of such meetings should not be lost sight of and, if anything, should be enhanced by the common interests of such groups.

In the past, the most objective and permanent indication of the status of a profession has been its journals, and this will probably continue, but unless there is a major revamping of format, today's journals will lose out to other media. The journals covering the entire profession will become broader in scope, with more emphasis on what everyone needs to know: news, socio-economic developments, intraprofessional "politics" – in the broad sense, interprofessional relationships, and cultural features of particular interest to the veterinary population. In addition, with a new approach to content, journal advertising - which will continue to be an essential supporting arm - will evolve to a considerable extent into "technical exhibits." Scientific material will be restricted to specialty journals or - perhaps more likely - subscribed to on a topical basis in condensed form, with individual made available articles being through largely automated distribution means.

By comparison with today, the practitioner of tomorrow will be better educated, better trained, more skilful in one particular line — but more aware of what is going on in other areas of the veterinary profession, in medicine, the animal sciences, and the world at large. He will have a relatively better income and standard of living, including more time for pleasure as well as self-development, and will occupy a more prominent place in the affairs of man. As we have indicated, how far and how fast we will go is not susceptible to precise determination. But on the basis of past performance — history if you

will—we can and will go farther and faster than ever before, and those who believe otherwise would do well to look for another means of livelihood.

With due homage to the past, and with proper respect for the lessons it has to offer, the future can be one of unparalleled progress, limited only by the vision of those who dare to dream — and who have the courage and know-how to translate dreams into reality.