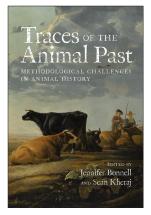
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TRACES OF THE ANIMAL PAST: METHODOLOGICAL CHALLENGES IN ANIMAL HISTORY

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Accessing Animal Health Knowledge: Popular Educators and Veterinary Science in Rural Ontario¹

Jody Hodgins

Before veterinarians were commonplace in rural Ontario, people purchased popular animal health manuals to learn more about the animals in their care. The manuals met a demand for a cost-effective way to access veterinary science and provide better health care to animals around the world.² However, veterinary professionals argued that the information in these manuals was "moth-eaten by its age."³ In 1920, a majority of students enrolled at the Ontario Veterinary College (OVC) petitioned the provincial government to recognize institutional standards of veterinary care.⁴ OVC's students argued that they were placed in an "illogical position" where it made "little sense" to continue investing their time and money into receiving a four-year institutional degree, when they could receive a diploma or certificate from The London Correspondence School's manuals in only eleven months.⁵ As veterinary science developed, licensing standards were contested and institutional education became standard for veterinary experts to receive accreditation. However, this transition did not happen overnight. In the late nineteenth century, veterinarians were

few and far between, often travelling long distances to treat an animal. At the time, this was both impractical and costly for many farmers. In this chapter, I argue that the knowledge presented in popular animal health manuals offered insight into common animal health concerns and animal histories before veterinarians were widely accessible in rural Ontario.

In actuality, animal health care was not practiced at veterinary institutions. Yet researchers rely on institutional sources to write histories of animal health. Before advancements in the 1920s made rural areas more accessible, rural Ontarians relied on oxen, and later horses, for work and transportation. To maintain the health of the animals they relied on, they gathered animal health knowledge through experience and conversations with their neighbours.⁶ Some farmers also gained understanding from animal health manuals purchased by subscription. This chapter focuses on the latter. Animal health manuals facilitated knowledge transmission over longer distances, communicating how other farmers had resolved the health problems that animals commonly faced. Together with distance education or "quack" veterinary schools, popular animal health manuals met a demand for animal health knowledge before veterinarians were readily available outside institutional centres.7 For example, farmers used equipment they had on hand and learned to isolate and shelter ill animals in clean, well-ventilated stables before germ theory was widely accepted and before blood tests and veterinary visits were accessible.

The Ontario Veterinary Association and OVC's push to standardize veterinary training at institutions and legally regulate who was qualified to administer veterinary medicine affected how those in rural areas could treat their animals. Historian Charlotte Borst shows how this contentious divide was also evident in the human medical profession, which saw specialized, urban, laboratory science valued over localized observations.⁸ Facing critiques of unscientific practices, farmers likely appreciated the localized knowledge promoted by authors of animal health manuals, many of which prioritized observation and quick recognition of symptoms in addition to the basics of veterinary science. For example, anatomical drawings presented scientific names, locations, and descriptions of healthy body parts to aid farmers in quickly recognizing problematic changes. However, distributing this empirical knowledge in animal health manuals directly to farmers "irritat[ed]" members of the veterinary profession "inside and outside the province" and sowed the seeds for larger debates about who had the right to access and practice veterinary science.⁹ Ultimately, by 1920, after fifty years of debate, the veterinary profession's push for standardization saw licensing authorities prioritize institutional training in their review of rural practitioners' credentials, denying licensing to those who held empirical knowledge or qualifications from distance education or correspondence schools.¹⁰

The demand for knowledge of veterinary science in rural areas without veterinarians created what some scholars have described as a "book farming" market. Generally associated with a series of popular eighteenth-century publications employed by "gentlemen landowners [in] exerting control over their servants or tenants in the management of their own farms," book farming is nevertheless relevant to the farmer-landowners of nine-teenth-century Ontario.¹¹ Historian James Fisher argues that book farming was "a symptom of social struggles generated by the shift to capitalist relations of agricultural production."¹² However, as I argue in this chapter, it also addressed a need for what one farmer described as an "interchange" of "intuitive knowledge" about animal health. Sold globally by subscription, the manuals examined in this chapter pooled collective wisdom and enabled the exchange of experiential animal health knowledge over long distances.¹³

Historical studies often overlook the realities of animal health in favour of the human perspective and "celebratory narratives of scientific progress."¹⁴ Lisa Cox notes that "animals are unique historical actors, as they are everywhere and nowhere in history," which is also true in professional histories of veterinary medicine.¹⁵ In *Valuing Animals: Veterinarians and their Patients in Modern America*, Susan Jones argues that changes in veterinary medicine and the socio-cultural role of animals cannot be understood as "processes isolated from each other."¹⁶ In a similar vein, Abigail Woods maintains that studying medical history in isolation from the veterinary profession and the animal experience "grant[s] a timeless universality to scientific interpretations that are in fact products of specific historical circumstances."¹⁷ Like Jones and Woods, I argue that animal health and veterinary medicine should not be studied in the absence of animals themselves. Etienne Benson argued that "traces" of the animal past found in human sources provide rich insight into "historical changes" in the animal-human relationship.¹⁸ As historical traces of this changing relationship, popular animal health manuals offer a lens into common animal health realities in rural environments.

To access animal history as it occurred on the ground and without records from animals themselves, historians necessarily rely on anthropocentric interpretations of animals' lived experiences and what people felt was important to record. The animal health manuals included in this chapter do not focus on the life journey of specific animals or their feelings. Rather, these manuals focus on species as a whole and observed behaviours or physical evidence that provided readers with an understanding of how animals generally reacted or changed as an injury or illness progressed. Farmers reading these manuals found generalized examples of good health and what specific changes or behaviours might mean based on what others had experienced and what treatments they found successful, a dialogue that was also common in the correspondence sections of agricultural journals at the time. The animals in these manuals exist theoretically as a central object of concern. However, the anatomical drawings and descriptions of animal behaviour in each manual act, as Sandra Swart outlines in Chapter 1 of this volume, as a guide to animals' bodies that aid the reader in diagnosing animals and administering treatments. By conveying typical animal experiences and instructing readers on how to recognize and interpret changes in animal behaviour and physicality, animal health manuals offer an important corrective to the anthropocentric narratives of professional and institutional histories.

In this chapter, I will examine different editions of several popular animal health publications: *The Domestic Encyclopedia of Facts or Farmers, Mechanics, and Household Manual* (1879), *The Stockman Guide and Manual to Husbandry* (1903), the London Correspondence School's *The Veterinary Science* (1907), and Dr. George Bell's pamphlets advertising his "Veterinary Medical Wonder." These popular animal health manuals were discovered on the back shelves of rural public archives or in private family collections located within 300 km of Toronto (the original site of OVC), Guelph (the current location of OVC, established in 1920), and the London Veterinary Correspondence School. Farmers purchased these manuals by subscription, possibly after reading an advertisement in a local newspaper or agricultural journal. The prevalence of these manuals in rural archival collections signals their historical significance. Not only were they a significant aid to farmers in this period, but they were also a rich source of animal health solutions. Popular animal health manuals provide evidence of commonly observed animal behaviour and physical wellness, animal health practices in rural areas, and how these practices changed with the development of veterinary science and the professionalization of veterinary medicine.

Evidence of common animal behaviour and animal health practices can be found in the oldest animal health manual in this study, The Domestic Encyclopedia of Facts or Farmers, Mechanics, and Household Manual, by J. Gurnley Thompson. A. M. Schuyley Smith and Co. published this manual in 1879 during a period of increasing demand for animal health lectures at OVC. Thompson covered an extensive range of general topics that affected rural families and their household economies. He included specific chapters on horses, mules, cattle, sheep, swine, domestic animals, poultry, dogs, bees, and insects that contrasted with more thematic chapters on accidents and injuries, family physicians, recipes, and "How to be your own lawyer."19 Thompson included illustrations and empirical descriptions to provide clear instructions for what he considered to be important animal health knowledge for farmers with varying levels of experience. This 746page manual was "sold only by subscription" from Odebolt, Iowa, to a reader whose copy was donated to the Simcoe County archives, 200 km from Toronto and Guelph's OVC campuses.²⁰

Thompson's drawings of prize-winning animals were added to the beginning of each section to illustrate breeding standards and to depict the "rapid and valuable improvements that have been made in stock-raising." He argued that this "should stimulate our farmers to active effort, [and] continued improvement in their Domestic Animals."²¹ Thompson explained that desirable traits varied based on a farmer's needs. "Big hocks and knees, flat legs with large sinews, open jaws, and full nostrils" were desirable traits for all breeds of horses. However, Thompson noted that a horse with an "oblique shoulder-blade [was] an imperative necessity" for "speed and activity," although this trait was less desirable for workhorses because a "heavy harness" caused "pressure [on] the collar."²² Experienced farmers likely already emphasized these values in their breeding practices.²³ At the very least, Thompson's descriptions provide researchers with

an overall picture of how farmers with varying levels of experience understood breeding standards, and what was considered common practice or an advancement at the time.

Thompson recognized that people who worked with horses knew how to assess equine dental health because it was at the root of many health concerns, providing information about the age and health of the animal for sales and insurance purposes. A blacksmith with generational experience breeding horses in Simcoe County, where the manual was found, would have been aware of these dental assessment methods. But Thompson wanted others to appreciate the possible costs associated with not recognizing equine dental problems.²⁴ Thompson also used illustrations of equine dentistry to show animal owners how "dishonest dealers may attempt to disguise age, by reproducing the mark in the corner teeth by means of a hot iron or caustic" (Figure 5.1).²⁵ He considered this knowledge essential for new farmers but was quick to note that this type of fraud was "easily detected by a horseman" because the mark was "usually overdone."²⁶ This cautionary note illustrates the cruel treatment that some livestock animals were exposed to for financial gain. As Susan Nance argues in Chapter 4 of this volume, these animal histories are often overlooked or remain on the "periphery" of a human history about fraudulence, farm economies, and settler life.

Thompson continued by outlining other ways that fraudulent horse dealers may seek to mislead a buyer, like stimulating a horse to mask lameness, pain, injury, or disease.²⁷ He encouraged rural people to consult veterinarians, reasoning that the costs associated with a veterinarian's services would be less in the long term than purchasing an animal in ill health. Thompson recommended isolating animals on the first sign of disease.²⁸ His emphasis on isolating diseased animals, combined with his descriptions and illustrations of animal health, indicates how limited farmers' access to veterinary care was in this period. These descriptions also provide scholars with an understanding of the considerable knowledge about animal health and practical skills that livestock farmers possessed at the time of the book's publication in 1879.

Popular animal health manuals from the turn of the twentieth century included more veterinary science than earlier manuals. *The Stockman Guide and Manual to Husbandry* was not an exception. An edition



FIG. 3.—AT ONE YEAR OLD.



FIG. 5.-AT THREE YEARS OLD.



FIG. 7.—AT FIVE YEARS OLD.



FIG. 4.—AT TWO YEARS OLD.



Source: Thompson, The Domestic Encyclopedia, 19.

Fig. 5.1 An illustrative description of how to determine a horse's age based

on their teeth.

FIG. 6.—AT FOUR YEARS OLD.



FIG. 8.—AT SIX YEARS OLD.



FIG. 9. AT SEVEN YEARS OLD. FIG. 10—AT EIGHT YEARS OLD. AGE OF THE HORSE, AS INDICATED BY THE TEETH.

published in 1903 offers 686 pages of illustrations, empirical evidence, and basic explanations of veterinary science that instructed livestock owners on how to care for their animals when faced with well-known injuries or disease. Different editions of *The Stockman Guide* are preserved in rural county archives. For this chapter, I focus on an edition from the private collection of a family with an extensive history of breeding workhorses and, later, racehorses.²⁹ This edition was distributed by the King-Richardson Company. As one of the largest subscription firms in the United States in 1891, the King-Richardson Company took advantage of a new tariff law that allowed subscription books to be sold in Canada as an educational book at a lower rate of duty.³⁰

The Stockman Guide and Manual to Husbandry included chapters on horses (the first 250 pages), cattle, sheep, poultry, swine, "enemies of the potato," household remedies for humans and animals, fruit culture and insects, legal issues, and a glossary explaining scientific terms. The authors took the time to describe scientific terms for the "humblest reader" because they believed that knowing scientific terms were not necessary to provide animals with effective health care.³¹ Rather, they valued observational and localized knowledge. The authors instructed farmers to become familiar with their animals' health so that they could recognize any changes quickly. Farmers' acquired knowledge, and the observations farmers made, would enable them to reach an animal in time to prevent or treat potentially fatal injuries, illness, or disease. Editor-in-chief Andrew A. Gardenier stated that the manual drew on the expertise of well-respected veterinary doctors to provide the public with an "accurate knowledge of the construction, location, and uses of the various parts of the body" for the first time.³² The drawings are still valued: the owner of this manual, for example, took the time to first show me the flip-up anatomical drawings or "manikins" of a horse's circulatory system, muscles, skeleton, organs, and reproductive system (Figure 5.2).³³ Gardenier's goal was to provide farmers with quick and efficient access to an animal's anatomy. Today, the same drawings shed light on how some farmers understood animal anatomy at the turn of the twentieth century.

Gardenier's expertise in physiology provided rural animal owners with scientific knowledge of their animal's anatomy, instead of relying on experiential knowledge gained from an autopsy or through slaughter. The authors periodically referenced the book's anatomical manikins to convey the size and location of an animal's organs and encouraged the reader to become familiar with their animal's pulse, respiration, skin consistency, and behaviour. Observing changes in their animals' health ensured that farmers would quickly recognize and isolate outbreaks of disease to accurately diagnose and treat their animals.³⁴ For example, farmers knew that animals were most susceptible to pneumonia in the spring and fall, or after suffering from influenza. So the authors provided a brief description of recent pneumonia outbreaks, environments that may carry the contagion, and the animals that are most susceptible, before instructing the farmer on how to distinguish between pneumonia and fibrinous pneumonia.³⁵

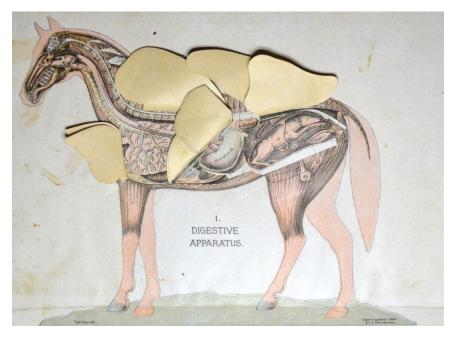


Fig. 5.2 An anatomical flip-up diagram of a horse in *The Stockman Guide and Manual to Husbandry*. Source: Gardenier, *The Successful Stockman and Manual of Husbandry*, 1.

Gardenier explained how farmers could make these distinctions by examining the progression of symptoms, considering environmental conditions, and listening to changes in an animal's cough, lung congestion, and pulse.³⁶ This approach saw authors of popular animal health manuals explain basic scientific advancements to aid farmers' localized observations. Animal health experts' emphasis on becoming familiar with animal health changes offers a lens into rural settlers' understanding of animal anatomy and the common experiences of domesticated animals in early twentieth-century Ontario.

The authors of *The Stockman Guide and Manual to Husbandry* were confident that their instructions would prove successful. However, they admit that farmers' "impatience" and their demands for immediate results were reoccurring problems that could hinder a farmer's ability to observe an animal's reaction, and consequently, their ability to provide proper care.³⁷ This insight demonstrates the authors' understanding of

how their instructions were received and the significant gaps that could exist between animals who experienced farmers' care and the knowledge of veterinarians who were trained to deal with injuries and illnesses that farmers may not have previously experienced.

The transition to institutional veterinary training did not occur immediately after the Ontario Veterinary Medical Association was established in 1874. Veterinary historians argue that the London Correspondence Veterinary School, established in 1896, was a "notorious nuisance" in Canada, the United States, and countries as far away as New Zealand for some time.³⁸ Before 1920, people who made a one-time payment of \$25 or several instalments amounting to \$40 to the London Veterinary Correspondence School could become licensed veterinarians.³⁹ C. A. V. Barker, a veterinarian and founder of the C. A. V. Barker Museum of Canadian Veterinary History, and historian Margaret Evans argue that it was "absurd" for people to believe that a correspondence school could "turn 'all and sundry' into competent practitioners."40 Yet hundreds of people continued to "naively" offer their veterinary credentials to state licensing boards "in the form of [a] very handsome but worthless diploma" after the Veterinary Science Practice Act was passed in 1920. The popularity of animal health manuals offers evidence not only of how farmers may have practiced animal health, but also of how loosely accredited animal health experts (who offered their services to others) practiced.

The London Correspondence School published many editions of *The Veterinary Science* that made their way into rural county archives. The 663-page text became very popular, with 107 editions published by 1907, and eighteen editions in its first year, with copyright in at least seven countries.⁴¹ Given its popularity, it is clear that it met a demand for knowledge of veterinary science through correspondence or distance education delivered in the mail. The authors, J. E. Hodgins V.S. V.D., President of the Veterinary Science Company that ran the London Veterinary Correspondence School, and T. H. Haskett, D.V.D., the school's Secretary Treasurer, marketed their popular animal health manual as less costly and less time-consuming than institutionalized forms of education. They claimed that *The Veterinary Science* was "equivalent to a thorough practical course in a Veterinary College."⁴² However, Barker and Evans argue that "gullible persons" were convinced to enrol in the correspondence

course that was at a "level about that of a first-aid manual" where "science was a misnomer."⁴³ Nevertheless, it is clear that Hodgins and Haskett were meeting a demand for access to animal health knowledge. Their manual provides researchers with evidence of animal health care treatments that were likely experienced by the animals in the care of its readership.

Hodgins and Haskett simplified scientific descriptions, provided illustrative examples, and included an index of symptoms to bridge a gap in the "social organisation [and accessibility] of agricultural knowledge" and to set them apart from other animal health manuals.⁴⁴ The authors claimed that this made it "very easy to find out from what an animal [was] suffering" and quickly provide treatment.⁴⁵ They recognized a growing need to include scientific interpretations of animal anatomy and focus on disease and injuries that affected domestic livestock.⁴⁶ In revised editions, they added illustrations and plates, a chapter on domestic animals, and a greater focus on disease to "remain comprehensive, concise and abreast of the times in the latest and most approved methods of treatment."47 For example, Hodgins and Haskett's illustration of a common technique for castrating a horse, called "Belt Tackling," shows landscaped environments and three farmers moving the horse using belts and pulleys to secure the horse (Figure 5.3).⁴⁸ The authors argued that this more technical approach was better than older methods, like The Domestic Encyclopedia's reference to using chloroform and The Stockman's Guide and Manual to Husbandry's written description of using a "web halter" to confine and "expose" the horse.⁴⁹ All of these approaches assumed the need to confine and limit an animals' movement rather than work with or distract the animal. The belt and pulley system was used to limit the animal's reaction to this treatment and, like Rothfels notes in Chapter 10 of this volume, shows "one layer covering a history of earlier stories" of what actually happened or what some experts imagined might happen. Hodgins and Haskett believed that their illustrative instructions would meet a demand for knowledge and improve animal health practices in rural areas, despite the implications this had for the confined horse. Their use of illustrations to disseminate knowledge of veterinary science provides evidence of the practical realities of animal health care in the early twentieth century.

A slow acceptance of germ theory meant that many farmers relied on folk remedies and "vernacular veterinary medicine" to treat animals Fig. 5.3. An illustration of "The Belt Tackling" method for castrating a horse, which was regularly used by the authors and other Canadians. Source: Hodgins and Haskett, *The Veterinary Science*, 201.



into the early twentieth century.⁵⁰ Barker and Evans commend Hodgins and Haskett for using "common-sense" to recommend "send[ing] for a veterinary inspector if glanders was suspected."51 However, they contend that "hog cholera was confused with anthrax, paralysis was listed among diseases, and rabies was described as originating spontaneously in hot weather." "Crude instructions were given for castration and spaying, the bleeding of a horse with fleams, the enucleation of a dog's eye without anesthesia, [and] the sewing of wounds with the small carriage trimmers' twine."52 These treatments are clearly unacceptable compared to today's standards, but they reveal how farmers may have practiced animal health care at the time and what animals may have experienced. The Farmer's Advocate argued that these instructions allowed rural people "fired with ambition to obtain knowledge" to be "diverted from the right path into devious ways."53 Yet by overlooking the procedures in support of a more linear narrative of the progress of modern veterinary medicine, researchers have ignored what the sources tell us about the everyday practices of farmers in caring for their livestock. Combining this information with

evidence from other social and cultural sources offers insight into the health of animals and the common practices they may have experienced at the time, regardless of the efficacy.

Appeals to the Government of Ontario to resolve issues with accreditation and to close the London Correspondence School persisted until 1920. OVC graduates petitioned the provincial government to comply with OVC's standards "of entrance and study."⁵⁴ However, a clause in the Veterinary Practice Act indicated that "non-graduates who had been practicing in Ontario for a number of years [could] continue as before" without granting them "the title of Veterinary Surgeon or the privileges accompanying a college degree."55 Ontario's Veterinary Practice Board questioned Hodgins about the integrity and ethical standards of his instruction before exempting his accreditation and making him an "Honorary Graduate of [OVC]."56 He was listed as a Veterinary Surgeon in the City of London directory for five more years, two years longer than his book's publication lasted. However, Haskett, a self-styled veterinary dentist, and Secretary of the Veterinary Science Association, was denied certification and left the veterinary publication business.⁵⁷ Despite its faults, the Veterinary Science Practice Act in Ontario brought an end to almost fifty years of competition for certification between popular and institutional methods of disseminating veterinary knowledge.

Issues with popular alternatives to institutional veterinary medicine continued after the new law was passed and the London Correspondence School had dissolved. Dr. George Bell, developer of "Veterinary Medical Wonder," and "one of Canada's leading Veterinarians" for over forty years (as he claimed in his pamphlets from 1933) indicated that his popular cureall medicine would treat a number of ailments for different animals. ⁵⁸ He provided illustrative descriptions of animal suffering, specific diagnostic information, and precise dosages to quickly treat animals for a number of common ailments. Many of these pamphlets and advertisements are commonly found in rural county archives and online databases.

Formal institutional veterinary training and so-called "quack" medicine were not as distinct from one another as one may have thought. Bell graduated from OVC in 1880 and practiced in the United States for fifteen years before returning to Kingston, Ontario, to open and act as Principal of the Kingston College of Veterinarians. In only two years, however, Fig. 5.4. This advertisement is from Dr. George Bell's animal health pamphlet. Source: Bell, "First Aid for Sick Animal, Sixth Edition" (Grey County), 18.



Bell's "entrepreneurial spirit" had conflicted with more "conservative and academic medical science faculty."⁵⁹ In 1897, Bell offered to resign in exchange for a negotiated offer of \$125 and the ability to appoint his successor (who lasted three days before being replaced by Bell's adversary, Dr. A. P. Knight).⁶⁰ Regardless of Bell's institutional success, his entrepreneurial talent spoke for itself.

By 1933, the popularity of Dr. Bell's cure-all medicine and animal health pamphlets demonstrates farmers' desire for a quick, inexpensive alternative to veterinary care. To quickly treat white scours, a "dreaded" disease that affected cattle, Dr. Bell wrote that animal owners could "be of efficient service to [their] animals, saving them from disease and pain" by administering "one to three doses, of a few drops each." Dr. Bell argued that his medicine would bring "prompt, sure relief, in even the most advanced cases" (Figure 5.4).⁶¹ This supposed cure-all exposed animals to belladonna (from a highly poisonous herb, deadly nightshade) and alcohol, among other ingredients that were regularly used in animal and human medicine at the time.⁶² By indicating that animal owners did not have to wait for a veterinarian, Dr. Bell appealed to people who wanted to "sav[e] [animals]

from disease and pain" without the expense associated with a veterinary visit. Animal owners could purchase the cure-all medicine directly from a dealer or through the mail for "\$1.00 per bottle."⁶³ An online forum shows that Dr. Bell's medicine remained popular with people looking for replacement bottles as late as 2005.⁶⁴ Many bottles of Veterinary Medical Wonder are also preserved in Ontario museum collections.⁶⁵

Dr. Bell's illustrated pamphlets provide evidence of animals suffering from common ailments. To treat pneumonia, Dr. Bell first provided illustrative evidence of a horse's suffering to show how a horse would remain standing through immense pain (shown in the horse's expression) due to the pressure on its lungs (Figure 5.5).⁶⁶ After ensuring that an animal had the opportunity to recover in a healthy environment, free from drafts and changes in temperature that occurred in the spring and fall, Dr. Bell instructed farmers to wrap a horse in a blanket with bandaged legs for warmth, and to feed "tempting foods" like carrots and apples rather than grains until after the fever had passed.⁶⁷ Then, Dr. Bell instructed farmers to give three dosages of his Veterinary Medical Wonder every hour; twenty to thirty drops for horses weighing 900–1,200 lbs, or thirty to forty drops for horses weighing 1,300 to 1,500 lbs.⁶⁸ Dr. Bell claimed that farmers could accurately diagnose ailments among all of their animals by using his descriptive and illustrative examples of animal suffering. While there is little evidence of the effectiveness of these treatments, aside from testimonies included in Dr. Bell's marketing, the popularity of his products shows that farmers placed some faith in them and continued to purchase them for several decades. Examining Dr. Bell's approach to animal health care provides insight into how animal owners prioritized access to quick and cost-efficient treatments as an alternative to costly veterinary care in the early twentieth century.

Students at OVC challenged the dissemination of veterinary science through animal health manuals because the popularity of these manuals meant that many people were treating animals using empirical knowledge rather than seeking the expertise of institutionally trained veterinarians. By providing glimpses into common animal health-care practices, popular animal health manuals yield valuable insight into the history of animal health. These sources expand historical knowledge of animal health practices beyond the bounds of formal institutional care. While they do not

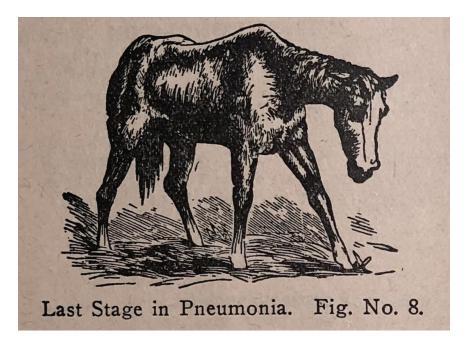


Fig. 5.5. This image depicts a horse suffering from pressure on its lungs in the late stages of pneumonia. Source: Bell, "First Aid for Sick Animal, Sixth Edition," 18.

provide specific examples of how farmers practiced animal health, their popularity shows a rural demand for this larger exchange of knowledge. Using these sources in combination with rural diaries, agricultural journals, newspapers, and advertising pamphlets grants historians access to the realities of animal health in rural environments.

Canada's institutionalization of veterinary medicine in 1862 did not instantly transform how rural people practiced animal health care or accessed knowledge of veterinary science. The animal health manuals examined in this chapter expose common issues that animals faced and popular strategies that rural owners may have used to care for their animals. These sources offer a window into animals' health and the common illnesses, diseases, or injuries that humans sought to heal in rural environments.

NOTES

- 1 The author is thankful to the organizers of the "Traces of the Animal Past" conference for inviting her to participate in such an inspiring conference, and to Jennifer Bonnell, Sean Kheraj, and other participants for their thoughtful comments. For their enthusiasm and commitment to finding these documents on their back shelves and the permission to use the images found in this chapter, the author would also like to thank the archivists and staff at Dufferin County Archives, Grey Bruce County Archives, and Simcoe County Archives. The author is also grateful to Helen (Bellwood) Hanna for taking the time to share her family's animal health manual.
- 2 J. E. Hodgins and T. H. Haskett, *The Veterinary Science* (HH-0009, Museum of Dufferin Archives, Dufferin County, 1907), preface.
- 3 "The Veterinary Correspondence School—A Fake," *The Farmer's Advocate and Home Magazine* XLV, no. 896 (November 24, 1909): 1571.
- 4 OVC was established to meet demands for innovative veterinary medicine in 1862 when Ontario's Board of Health enlisted the efforts of Andrew Smith in 1862, a veterinary surgeon educated in Scotland and a Fellow of the Royal Veterinary Society, to develop a formal veterinary curriculum. By 1920, seventy-two students submitted this petition to Premier Drury. C. A. V. Barker and A. Margaret Evans, *Century One: A History of the Ontario Veterinary Association, 1874–1974* (Guelph: Distributed by the Authors, 1976), 128–29.
- 5 OVC, located in Toronto, then Guelph, Ontario, was the first institution for veterinary medicine in Canada and sought to provide a curriculum equivalent to doctors of human medicine. The London Correspondence School offices were located in London, Ontario. Barker and Evans, *Century One*, 128.
- 6 Knowledge and labour exchanges between farmers were often intertwined. In *Tenants in Time* (Montreal: McGill-Queen's University Press, 2009), Cathy Wilson shows how farmers relied on labour exchanges with their neighbours to improve land, the raising of livestock, and overall farm economies. Rural diaries also show that farmers sought to limit their exposure to animal health risks, death, and the financial costs associated with this.
- 7 The term "quack" refers to practices in human and veterinary medicine that were unproven or did not meet professional and institutional standards. Alexander Bowman refers to farmers' empirical knowledge, noting that empirical knowledge has roots in anthropological and ethnographic research. It refers to knowledge exchanges and "reveals how this knowledge was developed through experience and informed by observation, local environments, peer learning, and lessons passed down." Alexander Bowman, "Dipping, Dosing, Drenching: Managing Unhealthy Beasts on British Farms," (PhD diss., King's College London, 2019), 2, 13.
- 8 Charlotte G. Borst, "'The Noblest Roman of Them All?' Professional versus Popular Views of America's Country Doctors," *Journal of the History of Medicine and Allied Sciences* 76, no. 1 (January 2021): 88, 100.
- 9 Barker and Evans, *Century One*, 127.
- 10 For examples of these type of cases, see Barker and Evans, *Century One*, 128–37.

- 11 James Fisher, "The Master Should Know More: Book-farming and the Conflict Over Agricultural Knowledge," *Cultural and Social History* 15, no. 3 (2018): 327.
- 12 Fisher, "The Master Should Know More," 327.
- 13 J. E. S. "Farm Intelligently," Ohio Farmer 52, no. 2 (July 1877): 19.
- 14 Abigail Woods et al., Animals and the Shaping of Modern Medicine: One Health and Its Histories (Cham, Switzerland: Springer, 2017), 11–12; Susan Jones, Valuing Animals: Veterinarians and Their Patients in Modern America (Baltimore: The Johns Hopkins University Press, 2002), 4.
- 15 Lisa Cox, "Finding Animals in History: Veterinary Artifacts and the Use of Material History," in *The Historical Animal*, ed. Susan Nance (Syracuse: Syracuse University Press, 2015), 99.
- 16 Jones, Valuing Animals, 4.
- 17 Woods et al., Animals and the Shaping of Modern Medicine, 13.
- 18 Etienne Benson, "Animal Writes: Historiography, Disciplinarily, and the Animal Trace," in *Making Animal Meaning*, ed. Linda Kalof and Georgina Montgomery (East Lansing: Michigan State University Press, 2011), 5–6.
- 19 J. Gurnley Thompson, *The Domestic Encyclopedia* (971.36, Simcoe County Archives, 1879), table of contents.
- 20 Other publications list London, Ontario, as the location of Schuyley Smith and Company's main office. Thompson, *The Domestic Encyclopedia*, front cover.
- 21 Thompson, The Domestic Encyclopedia, vii.
- 22 Thompson, 10.
- 23 Margaret Derry, *Art and Science in Breeding: Creating Better Chickens* (Toronto: University of Toronto Press, 2012).
- 24 William Standen, Diary Entries from 26 March 1879 and 2 March 1880 (Peterborough: Trent University Archives).
- 25 Thompson, The Domestic Encyclopedia, 19.
- 26 Thompson, 20.
- 27 Thompson, 21-25.
- 28 In 1879, before germ theory was widely understood, Thompson recommended isolating outbreaks of disease immediately. For examples of isolation recommended for cattle, see *The Domestic Encyclopedia*, 198, 701; for potatoes, see 432.
- 29 Provenance of Andrew A. Gardenier's, *The Successful Stockman and Manual of Husbandry* (Springfield, Mass: The King-Richardson Co, 1903), ix. From the private collection of Helen (Bellwood) Hanna, a resident of Stayner and later, Alliston, Ontario (Simcoe County). This edition includes a blank subscription form for *The Farmer's Advocate*.
- 30 The King-Richardson Co headquarters were in Springfield, Massachusetts, with branch offices spanning "all of the United States and Canada, with a few in such far-off places as Australia, Alaska and Bermuda." John Tebbel, A History of Book Publishing in the United States, vol. 2: The Expansion of an Industry (New York: R. R. Bowker Co., 1972), 459–61.
- 31 Gardenier, The Successful Stockman and Manual of Husbandry, xi.

- 32 Gardenier, xii. Gardenier received a PhD in physiology and also arranged anatomical manikins for the *Lancet's* first volume in 1890.
- 33 Gardenier, 1.
- 34 Gardenier, 1. For example, in reference to the size and location of a horse's organs, symptoms, and treatments, see pages 38, 68, 114, 119, 124, 161, and 170. For the author's plea to readers to become familiar with their horse's anatomy, see page 79. The author refers to the anatomy of horses, cattle, sheep, swine, and poultry.
- 35 Gardenier, 133.
- 36 Gardenier, 134. Hodgins and Haskett also used this method regularly in their manual describing cold skin and extremities as a "death-like feeling," the size of pupils, heavy moaning or becoming delirious, nasal discharge, swelling joints as "full of oil" and "out too far," or changes to a cow's milk. Hodgins and Haskett, *The Veterinary Science*, 151, 250, 303, 305, 386.
- 37 Gardenier, 134. Hodgins and Haskett's *The Veterinary Science* was published by The Veterinary Science Association, whose head office was in London, Ontario, and branch office in Detroit, Michigan. An edition published in 1896 is available through *Canadiana Online.*
- 38 C. A. V. Barker "History of Veterinary Medicine," *The Canadian Encyclopedia*, 7 February 2006, updated on December 16, 2013, https://thecanadianencyclopedia.ca/en/ article/history-of-veterinary-medicine; Barker and Evans, *Century One*, 105.
- 39 "Veterinarians in Ontario," *Farmer's Advocate and Home Magazine*, 1003; Barker and Evans, *Century One*, 129.
- 40 "Veterinarians in Ontario," *Farmer's Advocate and Home Magazine* LIII, no. 1342 (June 13, 1918): 1003; Barker and Evans, *Century One*, 112, n. 31.
- 41 Barker and Evans, *Century One*, 127.
- 42 Barker and Evans, 127.
- 43 Barker and Evans, 127.
- 44 Fisher, The Master Should Know More, 317.
- 45 Hodgins and Haskett, The Veterinary Science, preface.
- 46 Hodgins and Haskett, 128.
- 47 Hodgins and Haskett, *The Veterinary Science* (HH-0009, Museum of Dufferin Archives, Dufferin County, 107th Edition, 1907), "Revised and Enlarged" Preface.
- 48 Hodgins and Haskett, The Veterinary Science, 200-1.
- 49 See Castration of a horse in *The Domestic Encyclopedia*, 124–25, *The Stockman's Guide and Manual to Husbandry*, 125, and *The Veterinary Science*, 200–4. These manuals also offer descriptions for castrating other animals.
- 50 For an account of how people used vernacular veterinary medicine, see Anthony P. Cavender and Donald B. Ball "Home Cures for Ailing Horses: A Case Study of Nineteenth-Century Vernacular Veterinary Medicine in Tennessee," *Agricultural History* 90, no. 3 (Summer 2016): 311–37.
- 51 Glanders is a fatal and incurable bacteriological disease that spreads quickly between horses in close quarters. Barker and Evans, *Century One*, 128.
- 52 Barker and Evans, 128.

- 53 The Veterinary Correspondence School-a Fake," Farmer's Advocate and Home Journal, XLV no. 896, (November 24, 1909): 1571.
- 54 Barker and Evans, Century One, 128.
- 55 O. P. A. Ferguson Papers, Agriculture Department, 1926. As found in Barker and Evans, *Century One*, 132.
- 56 Hodgins and Haskett, The Veterinary Science, 1897 and 1907, title page.
- 57 Hodgins and Haskett, title page; Barker and Evans, *Century One*, 129.
- 58 Dr. George Bell, "Prevention, Diagnosis and Treatment of Common Disease of Livestock" (A2019.017 PF2157F112, Grey Roots County Archives, Grey County, 1933).
- 59 Similar differences and division arose between Andrew Smith and Duncan MacEachern at OVC. Thomas W. Dukes, "On the Middle Road: Queen's University's foray into veterinary and comparative medicine," *The Canadian Veterinary Journal* 48, no. 9 (2007).
- 60 Dukes, "On the Middle Road," 31-34.
- 61 Dr. George Bell, "First Aid for Sick Animal, Sixth Edition" (A2012.084, Box 1, Collection of Sydney Jackson, Grey Roots County Archives, Grey County), 18.
- 62 Dr. Lisa Cox, Curator of the C. A. V. Barker Museum at OVC, personal communication, June 25, 2021. Cure-all medicines were commonly promoted as a way to self-heal for humans and a means for humans to treat their animals without access to doctors or veterinarians in rural areas. For a historical account of patent medicine development see Ross D. Petty, "Pain-Killer: A 19th Century Global Patent Medicine and the Beginnings of Modern Brand Marketing," *Journal of Macromarketing* 39, no. 3 (2019): 287–303; Denise Maines, "Why the Appeal? A study of almanacs advertising Dr. Chase's patent medicines, 1904–1959," *Pharmacy History* 145, no. 4 (2012): 180–85.
- 63 Bell, "First Aid for Sick Animal," 18, 44; Advertisements for Dr. Bell's Veterinary Medical Wonder appeared in many popular journals.
- 64 Online agricultural forums show how popular this drug was. One example shows people from Ontario, Texas, California, and Colorado commenting on its effectiveness. Some people were also still looking to buy replacements as late as 2005. "Dr. Bell's Veterinary Medical Wonder - Bull Session," https://ranchers.net/forum/viewtopic. php?t=2313.
- 65 The preservation of Dr. Bell's bottles would also be an insightful study that would speak to its popularity. C. A. V. Barker Museum of Canadian Veterinary History, Guelph, Ontario. Museum of Health Care at Kingston, Ontario.
- 66 Bell, "First Aid for Sick Animal, Sixth Edition," 18.
- 67 Bell, 17–18.
- 68 Bell, 18.