Sarah Cleghorn, circa 1895.
Sarah Cleghorn, Antivivisection, and Victorian Sensitivity About Pain and Cruelty

Cleghorn's concern for laboratory animals exemplifies the heightened sensitivity about pain that originated in the Victorian era.

By CRAIG BUETTINGER

In her autobiography, Threescore, Vermont poet Sarah N. Cleghorn described how she became an antivivisectionist. As a teenager in the 1890s, she was distressed at the thought of the pain suffered by people and animals. She lay awake at night "burning up with pity and rage to think of man and beast bearing unbearable pain." When she happened upon a pamphlet from the American Anti-Vivisection Society (AAVS) that simply reprinted a scientist's report of his experiments with animals, she joined the cause.¹

Cleghorn's concern for laboratory animals exemplifies the heightened sensitivity about pain that originated in the Victorian era, a sensitivity that William James called a "moral transformation." The Victorians anathematized pain, breaking with the traditional view that pain was an inevitable part of existence to be endured stoically. Empathy for the pain of others, whether people or animals, sparked the anticruelty movements of the age. To some Victorians, experiments on animals were repugnant no matter what the benefits to medical knowledge because of the pain inflicted in the process. The antivivisectionists occupied the most controversial position to be established under the banner of sensitivity to pain.²

Perhaps no antivivisectionist felt as much concern for the suffering of "man and beast" or expressed this compassion with such engaging
logic and style as did Cleghorn. Her life provides a case study of how the Victorians' revolutionary abhorrence of pain created a sense of urgent concern for the fate of laboratory animals in the mind of one thoughtful and sensitive woman.

Cleghorn (1876–1959) spent most of her life in Manchester, Vermont. Her family was living in Minneapolis when her mother died in 1885, and nine-year-old "Sally" came East to be raised by two aunts while her father continued his business career out West. She was educated at Manchester's Burr and Burton Seminary and spent a year at Radcliffe. Never married, Cleghorn resided with the surviving aunt for many years. She began to publish her poetry in 1906, her most famous poem being a simple quatrain from 1915 that used irony to convey the injustice of child labor in the textile mills: "The golf-links lie so near the mill/That almost every day/The laboring children can look out/And watch the men at play." 3

Cleghorn's writings made a strong impression on others. Her books drew many personal letters complimenting her compassionate nature. But Cleghorn could also put people off. The architect Herbert W. Congdon became acquainted with Cleghorn around 1900 and once took a country stroll with a group that included her. Congdon brought his shotgun. They were tramping along, singing merrily, he later recalled, when a partridge suddenly appeared. "Of course I went into action, seeing a tasty meal: BANG went my gun. The bird dropped in a cloud of feathers." Cleghorn, an unwilling witness to the killing, reacted with hurt and anger: "Sally rushed at me, red in the face, loud of voice, ready to claw me I thought. As I picked up the bird she burst into tears and screamed 'I hate you, I hate you!' as Dorothy [Canfield] tried to calm her down. She succeeded, but it was a quiet and uncomfortable trip back to the village." In Congdon's bemused and unsympathetic verdict, Cleghorn was "a decidedly peculiar person of very strong beliefs and feelings." He resented the sting of Cleghorn's words but also viewed her solicitude for the bird as odd and unacceptable. More than once Cleghorn would find herself dismissed as peculiar, cranky, or daft by people, usually men, who did not share and could not understand her feelings. 4

Cleghorn's "strong beliefs and feelings" included antivivisectionism. By the early 1900s experimentation on animals was well established in the foremost medical schools in the United States. The practice faced sharp criticism from the AAVS in Philadelphia, the nation's oldest such group (founded in 1883), and from antivivisection forces in other cities. The AAVS, an offshoot of the Women's Branch of the Pennsylvania Society for the Prevention of Cruelty to Animals, with close ties to the Women's Christian Temperance Union, was made up predominantly of
women and stressed Christian duty to show mercy to the weak. In 1908 experimenters formed their own organization, the Council for the Defense of Medical Research, with Harvard physiologist Walter B. Cannon as chair. Vivisection's proponents maintained that the medical benefits were enormous and that the use of anesthesia had all but eliminated the suffering of laboratory animals. The antivivisection societies published journals and had a formidable ally in the Hearst press, whereas most metropolitan newspapers and national magazines supported the laboratories. Champions and critics of animal experimentation debated antivivisection bills before state legislatures and Congress. Most bills advocated government regulation to follow the example set by Britain in 1876, but many individual antivivisectionists pushed for complete abolition of the experiments.

Perhaps the high-water mark of antivivisectionist influence occurred in 1916 amid the revelations of Dr. Udo J. Wile's syphilis experiments at the University of Michigan. Without the consent of patients or relatives, Wile trephined the skulls of insane syphilitics and extracted small amounts of brain tissue for experiments with rabbits; such actions, antivivisectionists said, confirmed their claim that the moral callousness born of animal experimentation would ultimately lead to human vivisection. Medical science weathered this storm, and in the 1920s the antivivisection movement lost ground precipitously in an era much attuned to the blandishments of science. Prior to 1920, however, critics and defenders vigorously contested the fate of vivisection.5

Character assassination took place on both sides. Antivivisectionists accused researchers of practicing "torture." As the Wile controversy indicates, antivivisectionists maintained that vivisection deadened the moral sense of researchers, progressively deepening their indifference to suffering and their "mania" for experiments. The Hearst press and the New York Anti-Vivisection Society (NYAVS), founded in 1907, produced especially lurid accounts of fiendish scientists and depraved experiments.6 For their part, the researchers and their allies in the media characterized the antivivisectionist attack on medical science as the work of irrational people. "Fanatic" was an epithet the scientists commonly applied to their opponents, and because most antivivisectionists were women, male researchers repeatedly accused them of "sentimentality" and "hysteria." In 1909 the neurologist Charles L. Dana claimed to have identified a specific mental illness, "zoophil-psychosis," that drives women to become antivivisectionists.7

Cleghorn maintained that she became an antivivisectionist based on what she read. In 1905 Cleghorn wrote to her father that she wanted a copy of The Vivisection Question by Dr. Albert Leffingwell as much
as she did *The Oxford Book of English Verse*. Leffingwell’s scrutiny of the medical literature of the 1880s and 1890s supplied the American antivivisectionists with many examples of painful lab procedures. Cleghorn called his collection of essays “a very weighty indictment” and drew upon it often in her writings.8

Cleghorn’s early antivivisection essays, which appeared in the AAVS’s *Journal of Zoophilys*, mirrored the arguments that the AAVS had been making for a generation. She began with the assumption that experiments were often painful. She questioned their utility, decrying “holocausts of animals” brought about in the development of serums that were eventually discarded. She claimed that vivisection brutalized the men who practiced it, so deadening their consciences and feelings that they were likely to move on to human vivisection. Above all, Cleghorn asserted, vivisection is fundamentally immoral because of the pain it inflicts. She wanted American medical laboratories regulated to eliminate animal suffering.9

Cleghorn also wrote to independent newspapers and periodicals, but publication outside the movement’s own media was difficult. In July 1910 *Atlantic Monthly* printed a lengthy defense of vivisection by Dr. Frederick L. Wachenheim, who stressed the medical benefits of animal experimentation and denounced the typical antivivisectionist as a “dog-worshipper” and “an enemy to mankind.” Cleghorn submitted a response. The editors replied that they respected her point of view but that their intention was to publish a “temperate paper on the side of the controversy which Dr. Wachenheim represents” and no more. Not wanting “to confute our own arguments” nor make the *Atlantic* “a controversial magazine,” they declined to publish Cleghorn’s letter.10

Cleghorn’s view of the vivisection issue was profoundly influenced when the renowned psychologist and philosopher William James entered the debate. In 1909 James penned a short essay on the vivisection question. He disliked the “bad temper” and “idiocy” that antivivisectionists displayed, but his quarrel was mainly with the scientists. With his pessimistic view of human nature, James argued that medical laboratories allowed humans to vent their inborn callousness, and he concluded that until experimentation was strictly regulated, the antivivisection agitation was justifiable.11

Cleghorn was of course gratified to know that James advocated regulation, but James’s indictment of antivivisectionists’ reasoning and temperament struck home with her as well. She cited James frequently in admonishing the antivivisectionists to be careful in what they said. When challenging broad vivisectionist claims in a 1914 essay, Cleghorn conceded that “on our side . . . equally wild and whirling statements are
sometimes made." Perhaps thinking in particular of the harsh language of the Hearst press or the NYAVS, she admitted James was right about antivivisectionists' bad temper. Cleghorn determined to proceed with the utmost reasonableness and civility in her writings. After 1910 Cleghorn stayed away from the brutalized-vivisector argument and conceded the medical benefits resulting from animal experimentation. But the moral question of the right and wrong of inflicting pain in the name of science remained.

She continued to claim that vivisection was cruel because of the suffering it caused, disputing the scientists' counterclaim that the introduction of anesthetics had minimized if not done away with the animals' pain. For shock value, she cited a physiology textbook, to which Leffingwell had first called attention, wherein Professor Austin Flint advocated not anesthetizing rabbits during demonstrations on the major nerves of the cranium because the cries of pain served to guide the physiologist's hand. But determined to be circumspect, Cleghorn conceded that physiological and surgical operations could be essentially painless if performed under anesthesia and if ended with a final lethal dose when the recuperation of the animal would have been filled with pain. Animals given diseases in pathological experiments were another matter altogether. Drawing on the research literature, Cleghorn remarked that animals do not have the benefit of anesthesia as "the poison works, the ulcers form in the eye, the hind legs begin to drag, the oft-mentioned 'purulent discharge' takes place, or the hair falls off the diseased body." Cleghorn was shocked by reports of lab animals found dead when researchers arrived in the morning. "Does Dr. Cabot suppose," she asked of an adversary, "that anybody sat up in the laboratory all night renewing the anaesthetic?"

Painful procedures were wrong in the light of Christian duty. To Victorian antivivisectionists like Cleghorn, mercy was the essence of Christian morality, and a cruel practice like vivisection was certainly not merciful. As Cleghorn explained, "The spirit of Christianity is generally opposed to all exploitation of the weaker by the stronger." Knowledge extracted in the labs might benefit people physically, but it damaged them spiritually. Cleghorn decried this Faustian bargain. "Vivisection may be useful, and I for one think likely it is," she wrote to American Magazine, "but it is cruel. It may help to turn us out strong and healthy . . . but it seems rather a hindrance than a help toward turning us out good Christians." With telling imagery, Cleghorn drove the point home: "I think not Dr. Keen or Dr. Cannon . . . can imagine Jesus assisting Dr. Austin Flint to divide the fifth nerve."

Cleghorn's sensitivity about pain was the root not only of her antivivisectionism but several other humanitarian interests as well. She sup-
ported the movements opposed to lynching and war. Troubled by the physical hardships resulting from poverty, Cleghorn became a Christian Socialist in 1912, the theme of social justice gaining importance in her antivivisection essays. She argued that money invested in experiments would be better spent improving housing, streets, and workplaces. It was a case of “the nearsightedness in the vivisectional eye” that scientists perceived lab experiments rather than social reform as the way to a healthier nation. In an essay entitled “Why Some Socialists Are Anti-Vivisectionists,” Cleghorn suggested that Rockefeller money went into labs (the Rockefeller Institute for Medical Research) instead of underwriting progressive social legislation because labs were “much less upsetting to the social order.”

Cleghorn’s convictions derived from disturbing reports of suffering in the labs, reports vivisectionists charged were exaggerated, misconstrued, or simply, as they said of Leffingwell’s essays, out-of-date. Cleghorn was willing to admit that what the experimenters said might be so, but she wanted to see for herself. Antivivisectionists made an issue of the “closed door”—researchers’ opposition to legislation that would establish state inspection of the labs. The New York Anti-Vivisection Society entitled its journal The Open Door. Behind closed doors, said the antivivisectionists, the experimenters had much to hide.

Spending the winter of 1915–1916 in East Orange, New Jersey, Cleghorn was close to several of the leading medical laboratories in the nation: the Pasteur Institute, the Rockefeller Institute for Medical Research, and the Cornell Medical School, all located in New York City. On December 12 Cleghorn wrote to the directors of the Pasteur Institute that she along with her friend Ella S. Bates were “anxious to visit” and see how the animals were treated, wishing “to be free to use all the information we gain, in all honest ways, in articles, lectures, etc.” She gave as references Drs. Allen Starr (a Columbia University neurologist) and Lewis A. Coffin (a surgeon at Manhattan Ear, Nose, and Throat Hospital who had operated on Cleghorn). The institute promptly replied, “We have made it a rule to discourage the admission of lay visitors.”

Cleghorn then wrote to the Rockefeller Institute. Her request fell into the hands of the general manager of the institute, Henry James, Jr., the son of William James. On December 27 he reported to the director, Simon Flexner, that Starr called Cleghorn a “cranky little old spinster from Vermont,” respectable but “daft on the subject of antivivisection.” Concluded James, “Under the circumstances I am not answering the attached [Cleghorn’s] letter.”

Not having heard from the institute, Cleghorn wrote again, prompting another memo from James to Flexner: “This is a vigorous antivivisec-
tionist. She has enquired to [sic] persistently + politely to be treated with silence. She must come and see or be refused, and she will publish the refusal. What do you think of this?” The decision was made to refuse. James wrote to Cleghorn that as she was “quite actively interested in the antivivisectionist agitation,” she would not be admitted. James explained that the institute would not disrupt its work to satisfy the curiosity of someone who lacked the competence to judge the methods and purposes of animal experimentation and who had “already announced a pre-judgement against the value and propriety of experimental research.”

Cleghorn responded to the refusal on January 17, 1916. She admitted, “I am indeed a very warm disbeliever in the justice and rightness of subjecting animals to severe pain for the benefit of human beings;” but she hoped a visit would bring her “the unbounded relief” of finding that little pain was involved. She said she would welcome proof that charges of animal suffering were mistaken, adding that she would then “be able to relieve the troubled hearts and consciences of many others” and would “be most assiduous . . . in doing so.” She concluded with this telling observation: “With deep regret that you cannot think fit to allow me to form any other than the ‘pre-’ (or rather, necessarily inferential) judgment you seem to deplore, I am, very sincerely, Sarah N. Cleghorn.”

“This sweet reasonableness almost melts my heart,” a nearly won-over James wrote to Flexner, beginning another round of memos at the institute. James added that if Flexner chose “to dally with the charmer I think you’ll convert her.” But Flexner apparently was not moved by Cleghorn’s arguments or the prospect of converting her. On January 24 James’s secretary informed Cleghorn that her letter had been received but James, having gone abroad, would be unable to reply.

Cleghorn next approached the Cornell Medical School, only to be told the school was “unable to grant her request.” Denied admittance to the laboratories in New York City, Cleghorn wrote to the medical schools at Johns Hopkins, Pennsylvania, and Harvard, institutions farther away from East Orange. Johns Hopkins never replied to her letter, nor to a second one she sent. Both Pennsylvania and Harvard, however, responded favorably to her request to see their medical labs. The dean at Pennsylvania told Cleghorn, “We have always been willing to show visitors through the Medical School despite the often malicious and unfounded statements of the American Anti-Vivisection Society” about closed doors. Cleghorn’s letter to Harvard was referred to the chairman of the Committee on Animals, who responded that a laboratory visit was possible on the condition that Cleghorn be recommended by the Animal Protection League of Boston.

The chairman of the Committee on Animals must have learned Cleg-
horn was an antivivisectionist just after posting this note. He sent her another, somewhat exasperated, missive four days later. He opened with a correction: the Massachusetts Society for the Prevention of Cruelty to Animals (MSPCA), not the Animal Protection League, must provide the recommendation; the mix-up, he said, was due to his being new to the job. He then added, “Will you be kind enough to let me know the capacity in which you propose coming, likewise that of your friend. I find that you publicly announce yourself as an Anti-Vivisectionist.” As the chairman saw it, this “casts some doubt as to whether your visit will be in the nature of an impartial inspection or whether you come with a biased mind and in the employ of someone else.” Cleghorn responded that she and Bates were indeed antivivisectionists but were not employed by any such organization and wished to view the labs simply as interested individuals. “I hope very much you will allow us to come,” she stated. “If you think us, as active anti-vivisectionists, mistaken in our views, surely you will all the more welcome the opportunity to show us the facts.”

Cleghorn next heard from Walter B. Cannon, Harvard’s famed physiologist and the chairman of the Council for the Defense of Medical Research. Cannon informed her of a new condition for her visit: she must be accompanied by Francis A. Rowley, the MSPCA president, to ensure that she did not jump to uninformed conclusions about the things she would see. Cannon did not mention that Rowley was a vivisection supporter. In subsequent correspondence with Cleghorn, Cannon further explained Harvard’s position: antivivisectionists had been generously admitted to the laboratories before. Ready to “say all manner of evil against us” even before entering, these visitors went on to claim to have witnessed wanton cruelty by “brutal caretakers.” The school had therefore established the policy that antivivisectionists must be accompanied by a third party “whose character and judgment should be respected” by both sides. “We believe Dr. Rowley is such a person,” Cannon concluded.

Joined by Rowley, to whom she had written, Cleghorn visited the laboratories of the Harvard Medical School on March 31, 1916. Cleghorn found Cannon and the other personnel she met on her tour through the physiology labs to be very courteous and candid, and she was pleased that they did not use language difficult for the layperson to understand. More important to her, the animals did not seem to be suffering much pain. The cages in which they were kept, though not as spic and span as SPCA hospital cages, did not offend her. She was satisfied that the animals she witnessed as they were undergoing experiments were without any sensation and that the postoperative and inoculated animals she saw were generally free of pain. From the physiology labs she went
to the bacteriology labs with Dr. Harold C. Ernst as her guide, and Cleghorn saw no signs of suffering there either. “The rank + file of experiments are not cruel,” she later concluded; “I saw nothing I thought painful.”

During the tour of the bacteriology labs, Rowley was called away, so Cleghorn and Ernst retired to the latter’s office. A frank face-to-face discussion between an experimenter and an antivivisectionist ensued. Ernst jabbed at antivivisectionist logic, pointing out that an antivivisection periodical had accused Harvard of animal cruelty based on the howl of a dog heard by a passerby. He stated that Edward H. Clement, the president of the New England Anti-Vivisection Society, had been invited to tour the Harvard labs only to respond that “he [Clement] did not wish to know.” Cleghorn, for her part, felt Ernst focused too much on antivivisectionists’ peculiarities and not on the issues. She told Ernst she favored Leffingwell’s call for regular reports from all animal labs and federal investigation. Ernst replied that all monitoring should be scientists’ self-regulation as embodied in guidelines provided by Cannon’s defense council, for only researchers themselves could properly evaluate what happened in labs. In response Cleghorn asked him if employers did not use that same argument regarding conditions in their factories, yet government had assumed the responsibility of investigating labor relations.

At this point, angered by Ernst’s contempt for the layperson, Cleghorn became blunt. She likened Ernst’s attitude toward regulation to Cornelius Vanderbilt’s “the public be damned.” This brought the interview to an angry close. As Cleghorn wrote, an insulted Ernst “said that he could not talk with me ‘after that.’” Cleghorn immediately apologized, realizing she had been unfair to a man who had shown her the courtesy of guiding her through his lab, but her visit to Harvard Medical School was over.35

Cleghorn mulled over her Harvard visit at great length, composing a thirteen-page personal memorandum. If the lab animals were being spared from pain, was outside regulation still necessary? She concluded it was. Although painful experiments “are perhaps rarer than I have feared,” they still, she was sure, occurred sometimes. Moreover, the “brahminical” attitude exhibited by Ernst troubled Cleghorn. As William James had argued, to control wanton callousness experimenters must be supervised by an authority they fear.36

Despite her conclusion that the struggle for regulation ought to continue, Cleghorn paradoxically gave little to the antivivisection cause after her visit to Harvard in 1916. Even the sensational matter of Wile’s experiments on humans in that year elicited nothing from her pen. The Harvard experience accounts in part for her disengagement from the
vivisection issue. Her observations at the university reduced her apprehensions about the extent of animal suffering in experimental labs. Her flare-up at Ernst left her upset with herself and perhaps unready to speak out against vivisection for the moment. At this juncture other matters arose that commanded her attention. For a pacifist and a socialist, the United States' entry into war and the Bolshevik Revolution were riveting events. In early 1918 Cleghorn wrote to fellow reformer Agnes Ryan that she was "swallowed up" by the issue of pacifism and thrilled by the events in revolutionary Russia.\(^{37}\) In 1920 she began a career as a teacher in the worker education movement.\(^{38}\) The antivivisection crusade itself went into rapid decline in these years; by the 1920s no appreciable movement existed to mobilize individuals such as Cleghorn.

Cleghorn never altogether stopped protesting vivisection. Her concern with the horrors of war brought her back to the issue of cruelty to animals when the military used dogs in poison gas tests after World War I.\(^{39}\) But her antivivisection correspondence and essays became scarce indeed. She never wrote her planned "Autobiography of an AV."\(^{40}\)

Cleghorn's life was a struggle against cruelty, a life that epitomized the Victorian "moral transformation" in attitudes toward pain. No practice seemed more cruel to Cleghorn than vivisection, and at the risk of being represented as an eccentric, she contributed her considerable skills as a writer to its regulation. After 1916 she became less involved in the cause. Her retirement from the fray only reflects the end of both the Victorian antivivisection movement and the Victorian age.

NOTES

1 Sarah N. Cleghorn, *Threescore* (New York: H. Smith & R. Haas, 1936), 68, 107. Scholars may consult not only Cleghorn's publications but also a fair amount of manuscript documents. The Sarah N. Cleghorn Papers, Special Collections, Bailey/Howe Library, University of Vermont, are the principal source for any study of Cleghorn. In this study, all citations to Cleghorn Papers refer to this collection. A smaller collection of Cleghorn papers, stemming from her later years in retirement in Philadelphia, is housed in the Friends Historical Library, Swarthmore College. (The Swarthmore materials postdate Cleghorn's period of antivivisection activity, but her continued affection for animals is much in evidence in her later writings.) Cleghorn letters to other activist women are located in a number of collections in the Schlesinger Library, Radcliffe College, and letters to her close friend Dorothy Canfield Fisher can be found in the latter's papers at the University of Vermont.


4 Manuscript autobiography, Herbert W. Congdon Papers, box 1, folder 55, Bailey/Howe Library, University of Vermont. I wish to thank Kevin Graffignino and Neil R. Stout for bringing this Cleghorn reference to my attention.


6 For an example of the argument that vivisection “blunted” the moral sense of researchers, see Caroline E. White, “Obliguity of the Moral Vision,” Journal of Zoophilys 3 (June 1894): 88. For an example of an extremely lurid rendition of the same argument by the NYAVS, see “The Stuff of Which Murderers Are Made,” Open Door 3 (March 1914): 5–6.


8 Albert Leffingwell, The Vivisection Question (New Haven: Tuttle, Morehouse & Taylor, 1901); Cleghorn to John D. Cleghorn, 7 February 1905, Sarah N. Cleghorn Papers, box 1, folder 8.


13 Ibid., 712.


16 Cleghorn, “Pros and Cons,” 284.

17 Cleghorn, “From an Anti-Vivisectionist,” 426.

18 Cleghorn, “Pros and Cons,” 284. William W. Keen of Philadelphia was a prominent spokesman for vivisection and was often engaged in exchanges with the AAVS.

19 To be an antivivisectionist and a socialist was not an uncommon combination. Franklin Rosemont, “Animal Rights,” in Mari Jo Buhle, Paul Buhle, and Dan Georgakas, eds., Encyclopedia of the American Left (New York: Garland, 1990), 40–43, provides an introduction to this matter.


22 Cleghorn to Directors of the Pasteur Institute, 12 December 1915; Gibier Rambaud to Cleghorn, 14 December 1915; both in Cleghorn Papers, box 1, folder 10.

23 Cleghorn to the Directors of the Rockefeller Institute, 17 December 1915, Rockefeller University Archives, RG 600-1, box 6, folder 2, Rockefeller Archive Center.

24 Henry James, Jr., [to Simon Flexner], 27 December 1915, Rockefeller University Archives, RG 600-1, box 6, folder 2.

25 Cleghorn to Directors of the Rockefeller Institute, 13 January 1916; James to Flexner, no date [attached to preceding letter]; James to Cleghorn, 15 January 1916; all in Rockefeller University Archives, RG 600-1, box 6, folder 2.

26 Cleghorn to James, 17 January 1916, Rockefeller University Archives, RG 600-1, box 6, folder 2.

27 James to Flexner, no date [attached to preceding letter]; Secretary to the Manager to Cleghorn, 24 January 1916; both in Rockefeller University Archives, RG 600-1, box 6, folder 2.

28 Cleghorn to Directors Cornell Medical School, 23 January 1916 and 14 February 1916; N. M. Polk to Cleghorn, 21 February 1916; all in Cleghorn Papers, box 1, folder 11.

29 Cleghorn to Johns Hopkins University, Harvard University, and University of Pennsylvania Medical Schools, 14 February 1916, Cleghorn Papers, box 1, folder 11. This is her handwritten copy of a letter she sent to all three institutions.

30 Cleghorn’s correspondence to Hopkins can be found in the John J. Abel Papers, box 10, Alan Mason Chesney Archives, the Johns Hopkins Medical Institutions, but there are no replies.

31 William Pepper to Cleghorn, 17 February 1916, Cleghorn Papers, box 1, folder 11. Cleghorn apparently never did visit the Penn medical labs.
32 S. B. Wolbach to Cleghorn, 21 February 1916, Cleghorn Papers, box 1, folder 11.
33 S. B. Wolbach to Cleghorn, 25 February 1916; Cleghorn to Wolbach, 10 March 1916; both in Cleghorn Papers, box 1, folder 11.
34 Walter B. Cannon to Cleghorn, 13 March 1916, 17 March 1916; both in Cleghorn Papers, box 1, folder 11.
35 Undated memo, Cleghorn Papers, box 1, folder 11.
36 Ibid.
37 Cleghorn to Agnes Ryan, 17 January 1918, box 6, folder 79, Agnes Ryan Papers, Schlesinger Library, Radcliffe College.
38 Cleghorn, Threescore, 225 ff.
40 Undated memo, Cleghorn Papers, box 8, folder 2.