

Title: *American Murderer: The Parasite that Haunted the South*

Author: Gail Jarrow

Genre: Nonfiction (Science)

Reviewer Name and Grade: Aydin E., Grade 8

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American Murderer is a nonfiction work and a part of the *Medical Fiascoes* series which details the history of hookworms. Hookworms, parasitic worms named for the hook-like structures on the ends of their tails, have infected humans for at least twelve thousand years. The hookworm species *Ancylostoma Duodenale* was discovered by an Italian doctor in 1838. Hookworms were found to cause severe anemia and fatigue, as well as symptoms like pale/yellow skin and pica- the eating of non-food materials like dirt, wood, coal and others. It was deduced by doctors that the parasites laid their eggs in human intestines, and the eggs were expelled from the body by way of feces, and the larvae would hatch and enter the bloodstream through the skin, causing irritating rashes. European doctors developed a treatment for the worms: thymol, an oil which would kill and expel the worms. Hookworms especially interested American parasitologist Charles Stiles, who had trained with the best German parasitologists and later worked for the US Department of Agriculture's Bureau of Animal Industry in Washington DC. The Bureau kept a collection of parasites, and Stiles found many jars of hookworms which infected animals, but no *Ancylostoma Duodenale*. Stiles reasoned that if animal hookworms could survive in the US, so could human hookworms, which primarily infected those living in Europe, Asia and Africa. People living in America were mainly from these continents. Curious, Stiles looked through American medical reports for symptoms like those of a hookworm infection and found references to such symptoms going back as far as 1809. However, none of the doctors connected these to hookworms, which didn't surprise him, as he knew American doctors weren't trained to spot them. Some respected doctors disagreed, believing that hookworm could generally not be overlooked. Stiles countered that those who weren't aware of its symptoms could overlook it. Several years later, doctors from Puerto Rico, Virginia and Texas sent Stiles specimens of a new species of hookworm. The most striking difference between the species later named *Necator Americanus* (American Murderer) and *Ancylostoma Duodenale* was *Necator's* cutting blades in its mouth as opposed to *Ancylostoma's* sharp teeth. This discovery prompted Stiles to take surveys and publish his findings, resulting in some attention from the US Public Health Service. His crusade against the hookworm, coupled with funds provided by John D. Rockefeller and informative posters regarding treatment (inexpensive thymol) and proper prevention (wearing shoes, preventing worms from entering through the feet, and clean outhouses, which many farms and workplaces in the South lacked) destroyed this "germ of laziness" and saved millions of lives. A informative work about the triumphs of early twentieth century doctors and the threats hookworms pose worldwide in poorer countries today, this compelling book is successful in informing and entertaining readers. An index, bibliography, quotation sources and image credits are provided at the end of the book.

Did the plot (for fiction) or presentation of information (for nonfiction) keep you interested?

Yes, the presentation of information kept me very interested throughout the book.

Was the pace of the book too fast, too slow, or just right?

The pace was right; the book mainly focused on the early 1900's, but I feel this was warranted based on the immense impacts of the anti-hookworm movement at the time.

What grade level(s) is this book appropriate for?

I would recommend this to readers Grade 6 and above, as some terminology may be a bit more complex.

What type of reader would you recommend this book to?

I would recommend this to those who are into medical sciences/biology.

What other information do you think would be helpful for teens to know about this book?

I believe that it is important for teens to know that this book was written in 2022, meaning that as of my date of writing, some “current” statistics may be outdated; however, I would still strongly recommend it.

Recommendation

5 stars: I'm really glad I read this book; it was awesome!

This book brilliantly tells the story of the hookworm, from its anatomy to its discovery in the Old World, discovery in the Americas and the fight against it, featuring persistent efforts of treatment and information from American doctors, who ultimately win and marginalize it as a minor disease. In the US, at least.