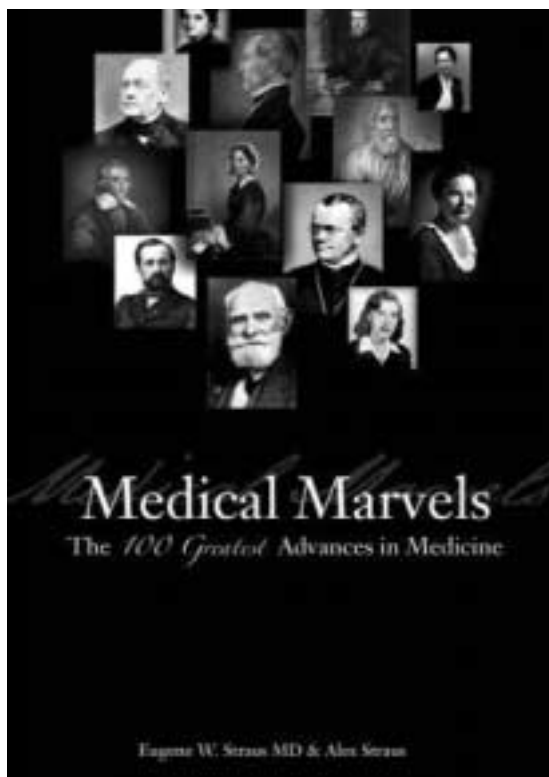


Medical Marvels: The 100 Greatest Advances in Medicine

Eugene W. Straus and Alex Straus
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Amid all of the gloom that surrounds contemporary healthcare, it is refreshing to encounter a work that so unabashedly celebrates the achievements of our medical forerunners. *Medical Marvels* is a catalogue of the greatest advances in medicine compiled by Eugene and Alex Straus. Their advances range from the early contributions of Hippocrates to the sequencing of the human genome; but what unites all of these landmarks is the advance that they spurred in our understanding of human health. Obviously, a list of this nature and the authors' decision to rank advances according to significance is subjective. However, the Straus' warn the reader of the pitfalls of this approach, and upon reflection, this ranking does not undermine the narrative. The fact that you are reading a "top 100" list becomes less significant as you read and you begin to develop a deep appreciation of the human spirit – such as that of Ignaz Semmelweis who, through tireless and ultimately thankless work, instituted the basic practice of proper handwashing.

Seeing such a contribution in its historical context allows one to appreciate the dogmatic nature of medicine and how dangerous it can be to work outside of established belief.

What sets *Medical Marvels* apart is not its inspiring set of tales though: it is its decision to focus on the greatest advances in medicine, and not the greatest achievements. At first idiosyncratic, this book soon immerses the reader in the key events that have shaped the healthcare we experience today, for better or worse. Sandwiched between descriptions of our emerging understanding of alcohol dependence and the development of preventative medicine is a passage detailing the development of fee-for-service and health maintenance organizations (HMOs). While uniformly praising the former two advances, the Straus' present a much more critical evaluation of fee-for-service and are downright callous about the emergence of managed care in the United States. Nonetheless, these advances have fundamentally altered the healthcare landscape of North America as we know it today. Although slanted to the American reader, *Medical Marvels* present an interesting argument against corporate intrusion into medicine.

Inspiring in its totality, *Medical Marvels* displays some editorial missteps. The presence of two authors is occasionally felt, as adjacent passages can seem dissonant in style, and redundant paragraphs are also noticed within at least ten entries. But the greatest flaw is the failure of the Straus' to properly research their arguments for socialized medicine and a single-payer system. The authors stress the virtues of the publicly-funded health care systems of Canada and the United Kingdom, yet they fail to acknowledge that a significant percentage of health care costs in both countries accrue in the private sector. Such selective argumentation is a dangerous position in today's emotionally-charged environment. If we are to act with the same integrity as those before us, we must strive to present the public with accurate information. Failure to do so will only stoke an already smouldering distrust.

Medical Marvels is a wonderful romp through some of humanities' greatest achievements: the discovery of microscopic life by Leeuwenhoek; the taming of X-rays by Roentgen; the re-discovery of sewage systems in London; the discoveries of Pasteur, Lister, Fleming, and Freud; and the evolution of prospective, randomized, double-blind trials. Such milestones will tempt any reader with a passing interest in human intellectual achievement and is required reading for those who will carry medicine into the future.