Magical Stones & Imperial Bones

From x-rays of the czar's and czarina's hands to Thomas Jefferson's ruminations on vaccines, *Magical Stones and Imperial Bones*—a new exhibit at the Countway Library of Medicine—showcases the library's medical history collection. The exhibit reflects six centuries of medicine, from ancient treatises on the healing value of jewels to an early sample of the penicillin mold.

X-rays of the Hands of Nicholas II and Alexandra, Emperor and Empress of Russia

Taken in 1898, these photographic prints are not only some of the earliest x-ray images, but are also particularly notable for the clarity of the imperial couple's bones and jewelry. While the diagnostic value of W. K. Röntgen's discovery several years earlier had been immediately apparent to physicians, this technology also entertained the public—even the royal public—with its novelty. At the czar's request, Dr. H. H. Horne had brought his x-ray apparatus to the Winter Palace at St. Petersburg. During the photographic session, according to the doctor's wife, the equipment overloaded the palace's electrical system, and she inadvertently bumped into the czar in the darkness.

Magical Stones & Imperial Bones

Vertebrae of President James Garfield

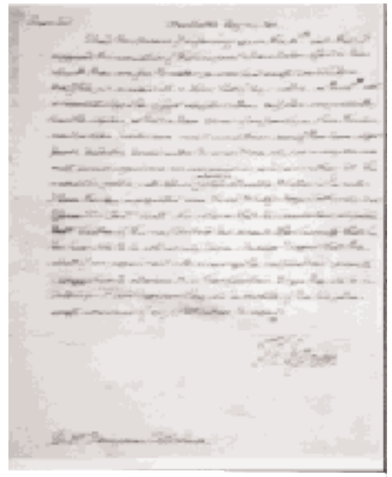
This photograph, part of a set of five taken by Washington photographer C. M. Bell after the autopsy on President Garfield's body in 1881, shows the hole that assassin Charles Julius Guiteau's bullet made in the president's spine. The bullet fractured the president's 11th and 12th ribs and passed through his vertebrae from the right side to the left. The autopsy revealed that the immediate cause of Garfield's death was a ruptured aneurysm in the splenic artery—damage caused by either the bullet or the surgical probes of the physicians trying to remove the bullet.

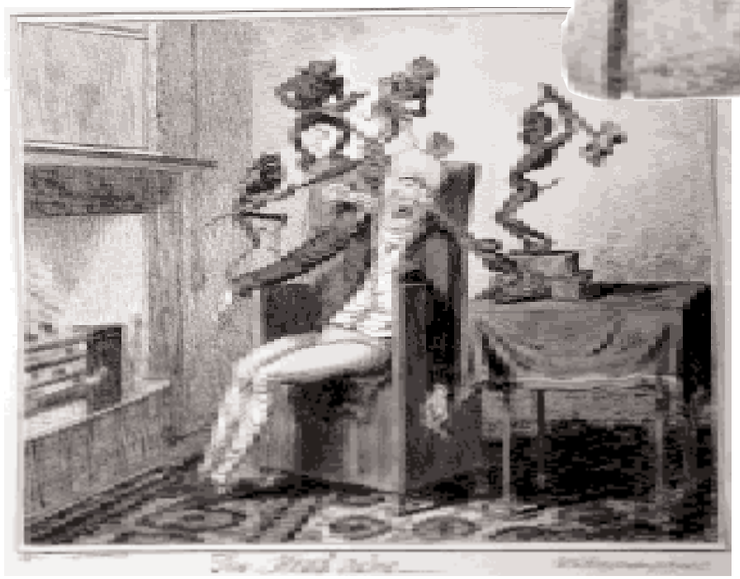
De Viribus Herbarum

Macer's *De Viribus Herbarum* ("On the powers of herbs") is one of the earliest surviving natural history texts from the Middle Ages. Nothing certain is known of "Macer Floridus," but the name is believed to be a pseudonym of a twelfth-century French physician, Odo of Meung. *De Viribus,* a hexameter poem of more than 2,200 lines, delineates the medicinal virtues of common plants and herbs. It was a standard text in some of Europe's earliest medical schools. This edition, printed in Naples in 1477, is one of the first printed books.

LETTER FROM THOMAS JEFFERSON TO BENJAMIN WATERHOUSE

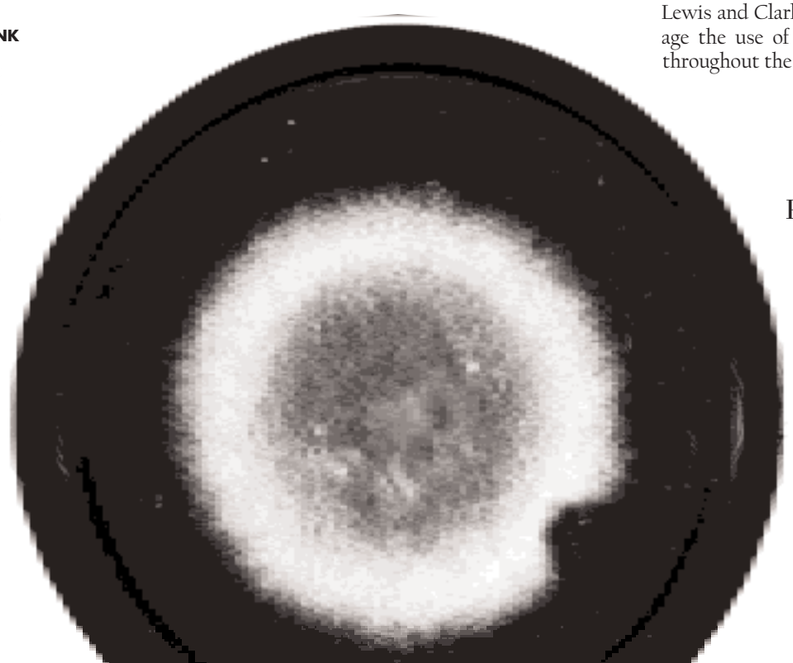
After successfully vaccinating his son against smallpox, Benjamin Waterhouse (1754–1846) sent a copy of his pamphlet *A Prospect of Exterminating the Small-Pox* to Thomas Jefferson, then vice president of the United States. Jefferson was keenly interested in Waterhouse's work, responding with, "Every friend of humanity must look with pleasure on this discovery, by which one more evil is withdrawn from the condition of man. In this line of proceeding you deserve well of your country." Waterhouse and Jefferson then corresponded on the subject for several months. As this letter from 1801 testifies, Jefferson used some vaccine matter from Waterhouse in experiments with members of his family and household staff at Monticello. Jefferson then promoted the use of the vaccine elsewhere in Virginia, gave some of his vaccine to Dr. John Redman Coxe to begin work in Philadelphia, and even sent samples with Lewis and Clark to encourage the use of vaccination throughout the country.





THE HEAD ACHE, BY GEORGE CRUIKSHANK

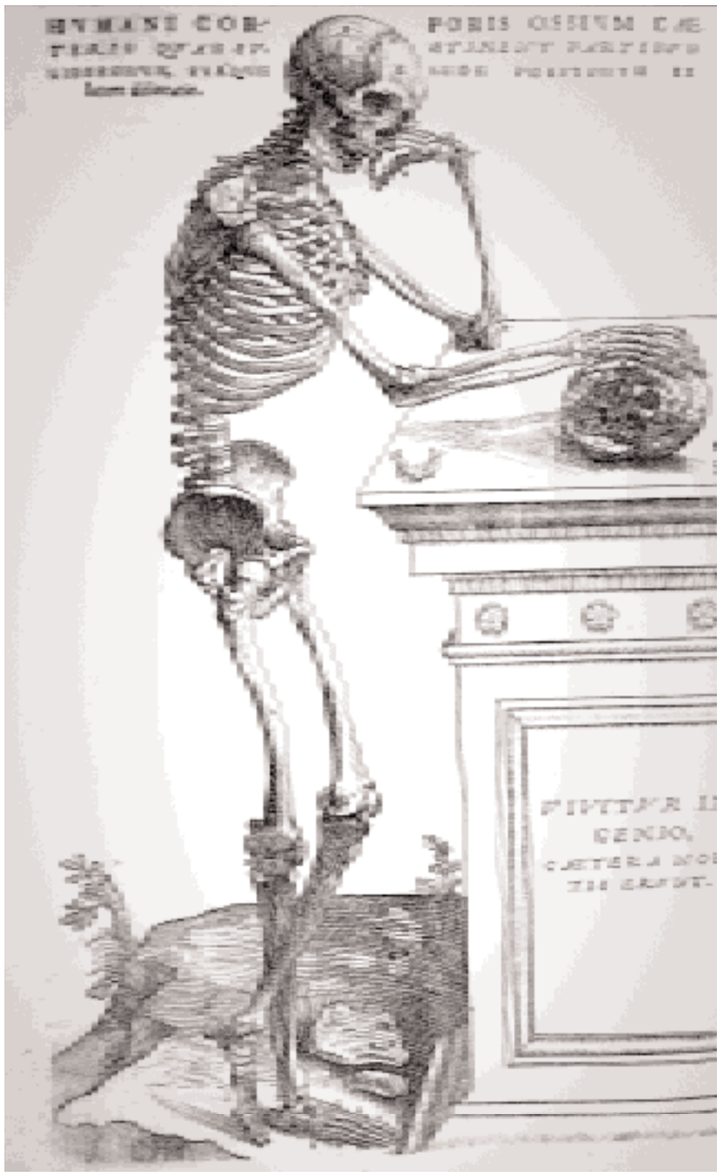
English artist and caricaturist George Cruikshank (1792–1878) was one of the foremost illustrators of the Regency and Victorian periods. He produced some 15,000 drawings and illustrated 850 books. Cruikshank's famous *Phrenological Illustrations* and his temperance tracts—*The Bottle* and *The Drunkard's Children*—are all in Countway Library's print collection. This less familiar engraving, which depicts an excruciating headache, forms part of a medical series showing the torments inflicted by the demons of colic, depression, jealousy, and indigestion.



Penicillium Notatum

This case contains a colony of *Penicillium notatum*—the mold from which penicillin is derived—which was grown in Alexander Fleming's laboratory around 1950. The British biochemist inadvertently discovered the antibacterial properties of the mold at St. Mary's Hospital in London in 1928, when he observed its ability to inhibit the growth of staphylococcus. Fleming later shared the Nobel prize with Howard Walter Florey and Ernst Boris Chain, who conducted the first clinical trials of penicillin in 1941. Infections from casualties during World War II prompted the efficient production of this landmark antibiotic and its transformation into the drug we know today.

Magical Stones & Imperial Bones

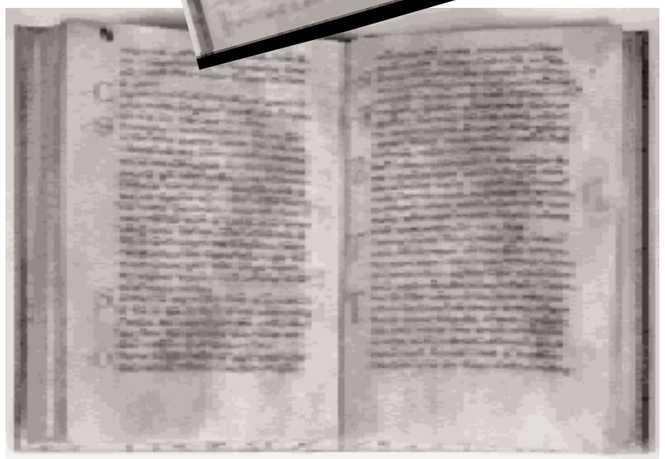


DE HUMANI CORPORIS FABRICA

One of the most renowned and beautiful of all medical books, Vesalius's *De Humani Corporis Fabrica* ("On the artistry of the human body") revolutionized the teaching of anatomy. Andreas Vesalius (1514–1564), a Flemish anatomist, believed that the body could only properly be examined through dissection and promoted the study of human anatomy in a series of layers—from the bones of the skeleton, through the muscles, blood vessels, and nervous system, to the organs and, finally, the brain. The seven books of the *Fabrica* systematically examine this series of layers. This first edition of the *Fabrica* is one of four copies in the Countway Library collection. Prominent neurologist and historian Henry Rouse Viets (1890–1969) credited his first sight of this particular copy—opened by physician Harvey Cushing "as gently as an obstetrician with a newborn babe"—with inspiring his interest in the history of medicine.

LECTURE NOTES BY WILLIAM JAMES

Although he never practiced as a physician, philosopher and psychologist William James (1842–1910) graduated from HMS in 1869 and taught physiology during the 1870s. While at Harvard, James used this notebook to record the lectures of Henry Bigelow, Henry Bowditch, and other members of the medical faculty. In a letter to his sister, Alice, from this period, James claimed he had just attended a lecture at HMS "which I could not understand a word of, but rather enjoyed the sensation of listening to for an hour." Here James—despite his wandering attention—has taken notes on Charles Edouard Brown-Séquard's lectures on writer's palsy and other diseases of the nervous system.



De Lapidibus

Bishop Marbode of Rennes (1035–1123) was a poet, teacher, and scholar. His best-known work, *De Lapidibus* ("On gemstones"), is a verse treatise describing the medicinal, therapeutic, and magical properties of 60 different jewels. The two leaves of this early-thirteenth-century edition describe the properties of chalcedony, emerald (smaragdus), sardonyx, onyx, sard, chrysolite, beryl, and topaz. *De Lapidibus* was one of the most popular works of scientific and medical lore in the Middle Ages. More than 125 Latin manuscripts have survived, and translations into French, Spanish, Irish, Hebrew, and English are known. This *De Lapidibus* manuscript is one of only three in the United States.

Exhibit curated by Jack Eckert, rare books and special collections reference librarian at the Francis A. Countway Library of Medicine.