

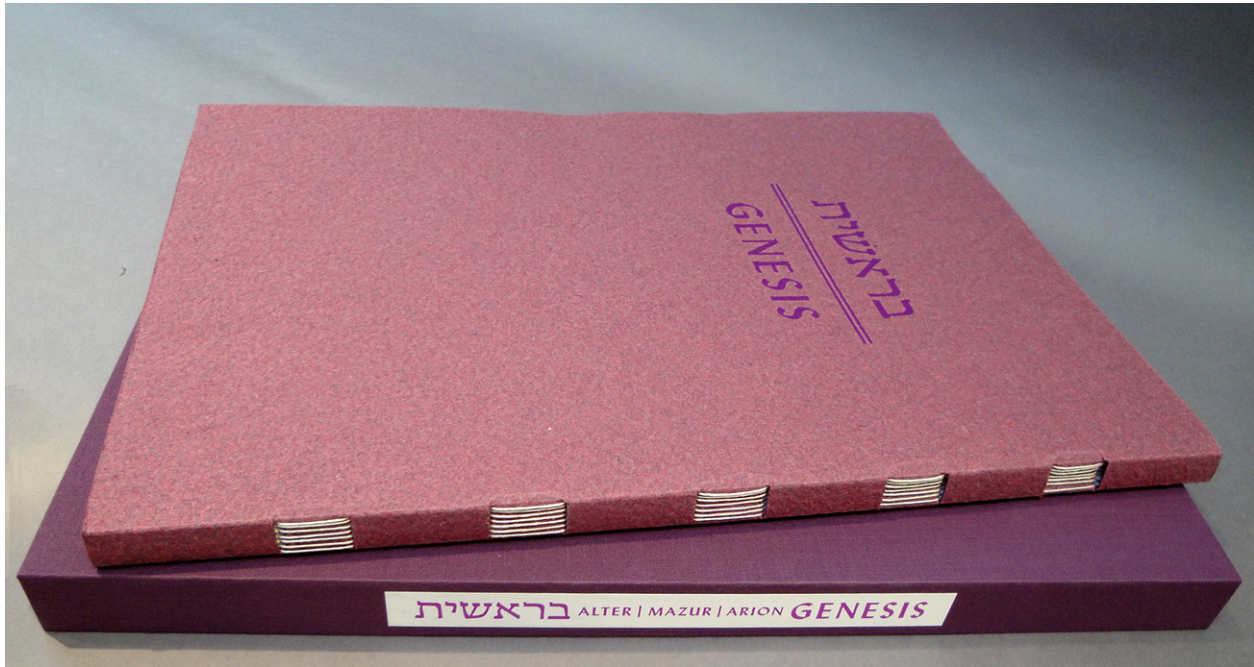
CATALOGUE 38:
Rare Books and Manuscripts on the
History of Science & Medicine

*With a Collection of Rare Materials
on the Notorious Libri Affair*



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Arion Press “Genesis”

1. **Arion Press.** Genesis. Translated from the Hebrew by Robert Alter. Largo folio, printed in two colors on handmade paper. No. 21 of 200 copies, signed by the translator at the foot of the colophon. Original two-color frontispiece etching by Michael Mazur, signed by the artist. 412 x 293 mm. Original purple handmade paper wrappers, cloth chemise and slipcase. Prospectus included. Mint copy. \$1450

“Designed as a large folio, the Arion edition is a typographic monument that balances the Hebrew and English texts on facing pages . . . Robert Alter’s translation of Genesis is an experiment in re-presenting the Bible—and, above all, biblical narrative prose—in a language that conveys with some precision the semantic nuances and the lively orchestration of literary effects of the Hebrew and at the same time has stylistic and rhythmic integrity as literary English” (Prospectus). 40851

One of the Earliest American Works on the Alleviation of Pain—First American Study of Acupuncture for Pain, with First English Translation of Ten Rhyne’s “De acupunctura”

2. (1) **Bache, Franklin** (1792-1864). Cases illustrative of the remedial effects of acupuncturation. In *North American Medical and Surgical Journal* 1 (1826): 311-321. (2) [Ten Rhyne, Wilhelm (1648-1700).] *Wilhelmi Ten Rhyne M.D. Transisalano. Daventriensis, Dissertatio de arthritide: Mantissa schematica: De acupunctura, et orationes tres . . .* In *ibid.*: 198-204. (3) **Hewson, Thomas.** Case of ecthyma cachecticum, with observations. In *ibid.*: 89-94; 2 hand-colored plates. Whole volume, 8vo. viii, [2], 495, [3, incl. adverts.]pp. 3 plates. 212 x 133 mm. 19th century half calf, marbled boards, leather spine label. Minor foxing and toning, but very good. From the Svenska Läkaresällskapets Bibliotek, with the library’s 19th century stamp on the title and front cover and library label inside front cover. \$7500

difficult to conceive the cause of the increase of its action in this decisive experiment.

I may, in conclusion, mention a fact which seems to puzzle even LE GALLOIS to explain, or conform to his theory. It is, that many cases are recorded of fetuses having been born, in whom there existed no brain or medulla spinalis. Several instances of this kind have been related, and LE GALLOIS admits that he knows of two instances, in which we are assured that they have been born alive, without either brain or medulla spinalis. This fact is irresistible, and proves, beyond the possibility of a doubt, that if life and the circulation of the blood can exist without these organs, they are not necessary to the action and propulsive power of the heart. That LE GALLOIS should admit this fact, and afterwards offer as an objection to the *vis insita*, that fetuses had been born without a brain, is indeed singular. In reality, every circumstance which he has adduced, can be (especially since the discoveries of Messrs. BELL and MAGENDIE) much more easily explained upon the hypothesis of a *vis insita*, than upon his own theory, however well supported, in appearance, by experiments and observations.

ARTICLE VIII.—Cases Illustrative of the Remedial Effects of Acupuncture. By FRANKLIN BACHE, M. D.

From the attention recently bestowed on this revived remedy, both in England and on the continent of Europe, by practitioners of eminence, and from the numerous cases detailed in the foreign Journals of its efficacy, in various affections, I was favourably impressed in regard to its powers, and determined, on the occurrence of a proper opportunity, to give it a fair trial. My situation, as assistant physician to the State Penitentiary in this city, soon afforded me this opportunity; and the cases which I am about to detail, occurred in my practice among the prisoners.

The cases, in which I used acupuncture, were, for the most part, painful affections, and may be arranged under the four general heads of *Muscular Rheumatism, Chronic Pains, Neuralgia, and Ophthalmia.*

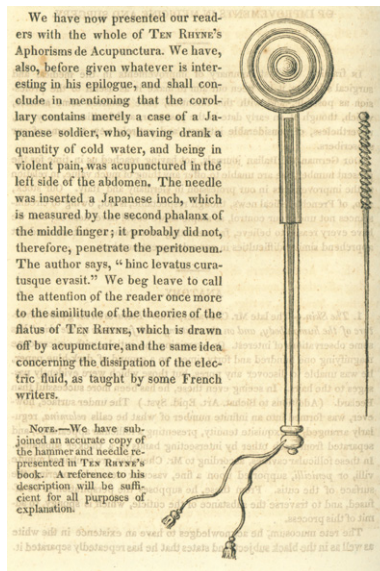
(1) First Edition of the first original study of acupuncture published in North America, one of the earliest American medical works on the alleviation of pain. Franklin Bache, great-grandson of Benjamin Franklin, was the first American to perform original research on acupuncture. In 1825 Bache had issued his translation of J. Morand's *Mémoire sur l'acupuncture* (1825) under the title *Memoir on Acupuncturation*; this was the first book on acupuncture to be published in America (see Garrison-Morton 6374.15). The same year, Bache conducted his own experimental study of acupuncture, which he recorded in the present paper.

As assistant physician at the state penitentiary in Philadelphia, Bache determined in 1825 to test acupuncture on the prisoners whom he was called upon to serve. With the aid of a colleague, he used the needles to treat 12 different prisoners who were suffering from highly painful afflictions: three with muscular rheumatism, four with

"chronic pains," three with neuralgia, and two with ophthalmia. He also used acupuncture among the prisoners in relieving several lesser pains, including a headache accompanying bilious fever, the head pain of an epileptic, an elastic tumor near the elbow joint, and a dull pain caused by pulmonic inflammation.

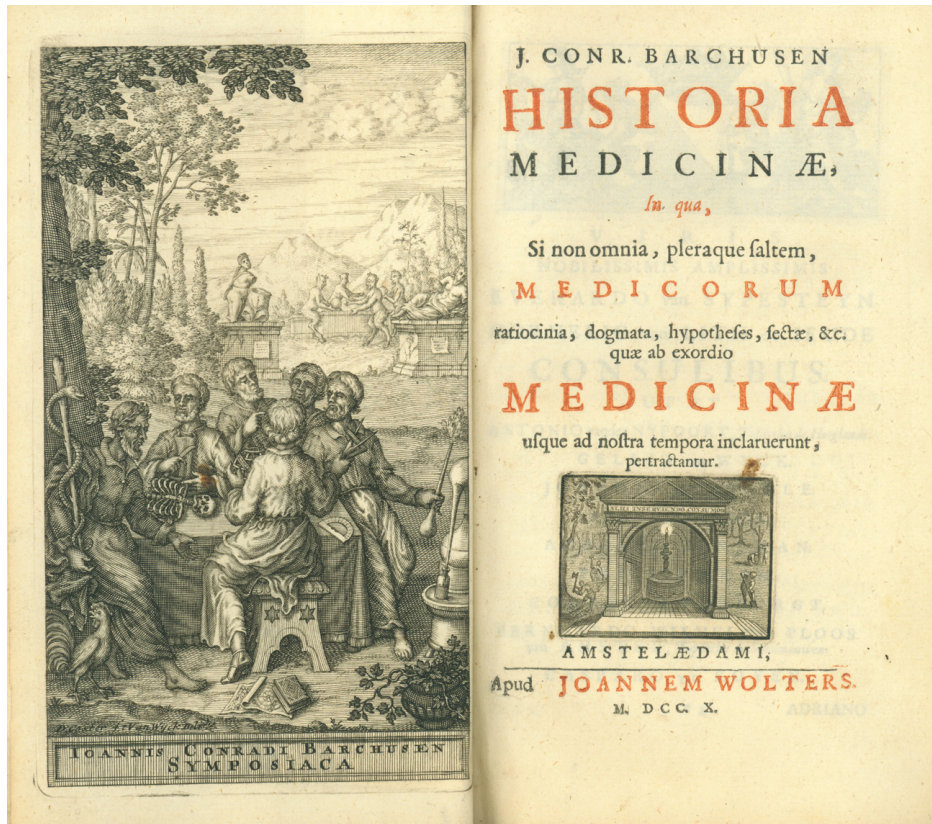
Bache reported varying successes. In summarizing 17 subsequent cases, some of which were not among the prisoners, he noted that seven "were completely cured, seven considerably relieved, and in the remaining three cases, the remedy produced no effect." Over all, Bache was convinced that the measure offered great promise for "removing and mitigating pain." He concluded that it could well be "a proper remedy in almost all diseases, whose prominent symptom is pain" (Cassedy, pp. 894-895).

Bache was one of the very few American physicians in the early nineteenth century to adopt acupuncture as a method of pain relief, despite the fact that the practice was enjoying a considerable vogue in Europe at the time. This volume of the *North American Medical and Surgical Journal* includes several brief abstracts from European journals on the uses of acupuncture; see pp. 225-227 and 448-449.



(2) First English Translation of Ten Rhyne's aphorisms on acupuncture, originally included in his *Dissertatio de arthritide* (1683; see Garrison-Morton 6374.10). Ten Rhyne's "De acupuncture" represents the first detailed description of acupuncture published in the West. The anonymous translators added a brief historical introduc-

tion and a copy of Ten Rhyne's illustration of an acupuncture needle and hammer.



(3) **First Edition.** Hewson's article on ecthyma (a skin infection similar to impetigo) is remarkable for its hand-colored plates, which are among the earliest to appear in an American medical periodical.

Volume 1 of the *North American Medical and Surgical Journal* is very rare on the market; and we have never heard of an offprint of this work. This is the first copy we have handled in 40 years of trading. Cassidy, "Early uses of acupuncture in the United States, with an addendum (1826) by Franklin Bache, M.D.," *Bulletin of the New York Academy of Medicine* 50 (1974): 892-906. "Wilhelm Ten Rhyne's *De acupuncture: An 1826 translation*," *Journal of the History of Medicine and Allied Sciences* 34 (1979): 81-92. Lu & Needham, *Celestial Lancets*, p. 299. 40833

"Drug of Forgetfulness"; Blood Transfusion; Acupuncture

3. **Barchusen, Johann Conrad** (1666-1723). *Historia medicinae, in qua, si non omnia, pleraque saltem, medicorum ratiocinia, dogmata, hypotheses, sectae, &c. quae ab exordio medicinae usque*

ad nostra tempora inclaruerunt, pertractantur. 8vo. [18], 632, [36]pp. Title in red and black. Engraved frontispiece, woodcut diagrams. Amsterdam: apud Joannem Wolters, 1710. 200 x 119 m. Vellum ca. 1710, gilt-lettered spine. Fine copy. \$2500

First Edition. Barchusen (also spelled Barkhuyzen, Barckhausen, etc.), a professor of medicine and chemistry at Utrecht, wrote a number of works on chemistry and pharmacology, as well as this early and little-known history of medicine. The last chapter of Barchusen's *Historia medicinae*, pp. 610-32, consists of his "Oratio de Nepenthe," a discussion of the "drug of forgetfulness" mentioned in ancient Greek literature and mythology (in the *Odyssey*, an Egyptian queen gives Helen of Troy a dose of "*nepenthe pharmakos*" to make her forget her sorrows). Barchusen appears to agree with most modern scholars that opium was the primary ingredient of this legendary drug; others have speculated that the compound might also have included belladonna or wormwood, noted for their painkilling and amnesiac properties.

Barchusen's contribution to the early literature of anesthesia seems to have escaped the notice of scholars of

the history of anesthesia. We could find no reference to him in the indexes of any of our references on the subject.

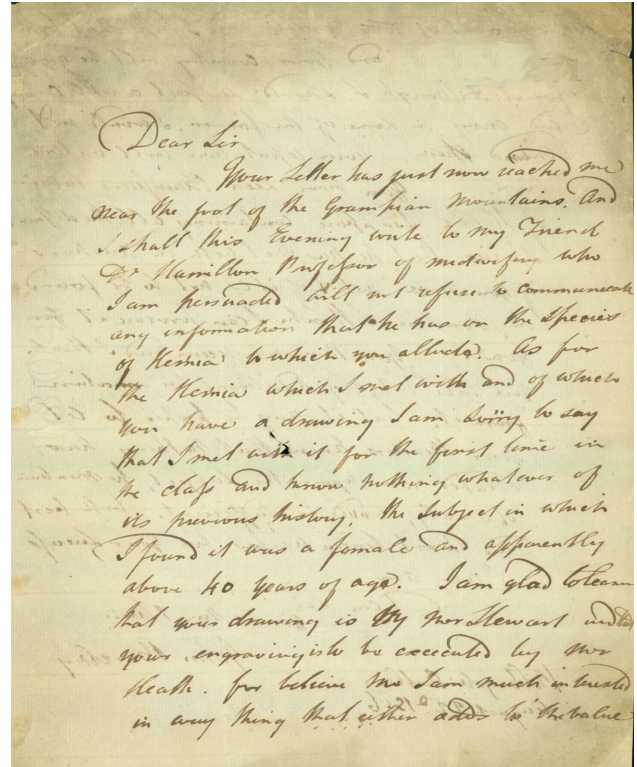
Page 489 of Barchusen's treatise contains a brief discussion of the operation of blood transfusion, citing the attempt at human-to-human transfusion made by Johann Daniel Major in 1666; Barchusen calls Major the "auctor seu inventor hujus operationis" (author or inventor of this operation). On pp. 370-73, 379-80 Barchusen discusses the writings of Cleyer and ten Rhyne on Chinese medicine and acupuncture, with a diagram concerning pulse medicine p. 380.

See Ferguson, *Bibliotheca chemica*, I, p. 72; Partington, *A History of Chemistry*, II, pp. 700-2. The first edition of Barchusen's book is scarce. This is the first copy we have handled in 40 years. 40697

"I am Much Interested in Any Thing that Either Adds to the Value or Ornament of your Work"

4. **Barclay, John** (1758-1826). Autograph letter signed to an unidentified recipient, almost certainly **Astley Cooper** (1768-1841). Kilbryde Castle [Scotland], August 22, 1806. 2pp. 227 x 187 mm. Minor dust-soiling, 2 or 3 small marginal tears, tiny paper flaw slightly affecting 1 word. Very good. \$850

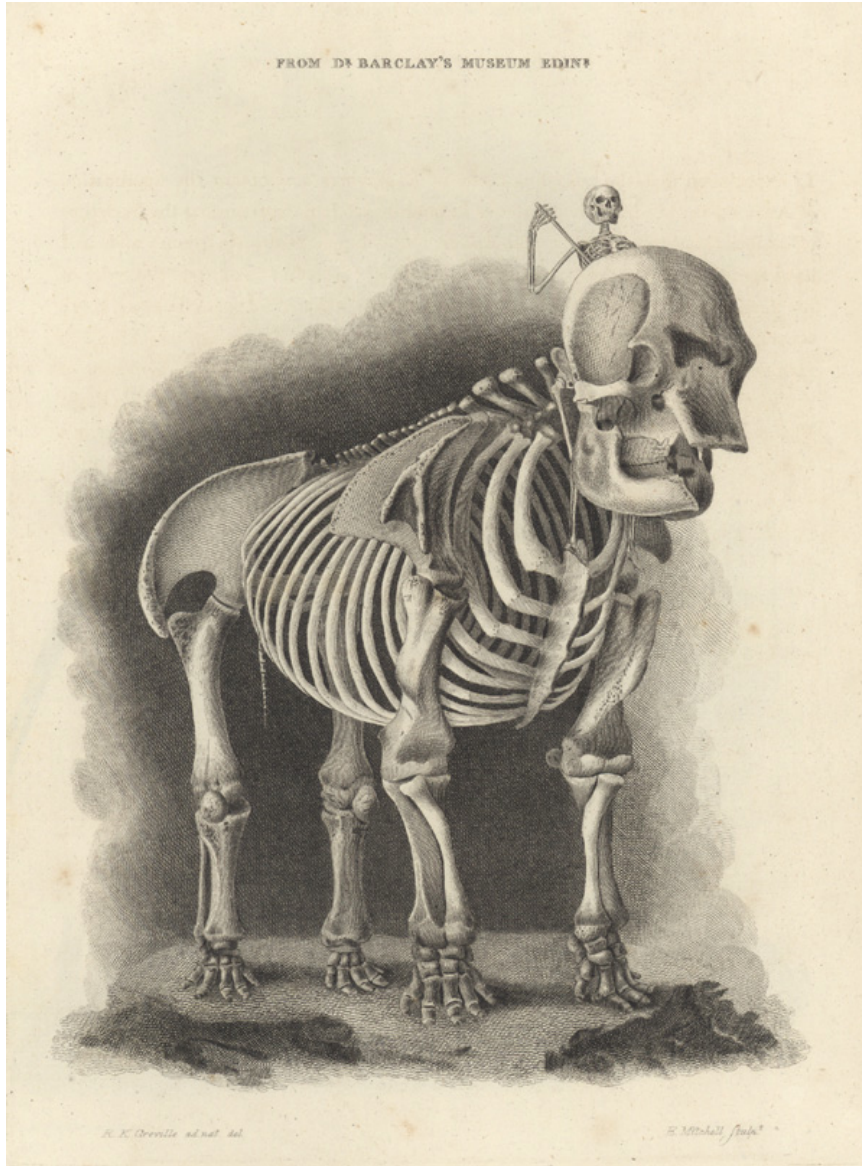
From John Barclay, one of the most distinguished teachers of anatomy in Edinburgh during the first decades of the 19th century, discussing different types of hernia. The recipient was almost certainly British surgeon Astley Cooper, who at the time this letter was written was in the midst of preparing the second volume of his classic work on the surgical treatment of hernia, published in 1807 (see Garrison-Morton 3581). William Fergusson, in his "Lectures on the progress of surgery during the present century" (*Medical Times and Gazette* 1 [June 11, 1864]: 635-38), noted that "when Astley Cooper was engaged in his great and interesting labours on hernia nothing would satisfy him but a sight of the fact that the obdurator artery might encircle the inner side of the neck of a crural hernia. The first preparation that gave this proof was in the museum of the famous professor of anatomy



in Edinburgh, John Barclay (now incorporated in the collection of the Royal College of Surgeons in that city), who actually forwarded it to London to satisfy the hesitation of the great surgeon. It was returned with complimentary thanks, and this anatomical fact, now familiar to the simplest novice, was soon after made extensively known to the professional world" (p. 636).

Barclay's letter reads in part as follows:

I shall this evening write to my friend Dr. Hamilton Professor of midwifery who I am persuaded will not refuse to communicate any information that he has on the species of hernia to which you allude. As for the hernia which I met with and of which you have a drawing I am sorry to say that I met with it for the first time in the class and know nothing whatever of its previous history. The subject in which I found it was a female and apparently above 40 years of age. I am glad to learn that your drawing is by Mr. Stewart and that your engraving is to be executed by Mr. Heath for believe me I am much interested in any thing that either adds to the value or ornament of your work and I hope that both your profession and your country will be grateful for it . . .



“Dr. Hamilton” refers to Alexander Hamilton (1739-1802), professor of midwifery at Edinburgh University and author of several works on obstetrics and gynecology. The engraver Barclay mentioned was James Heath (1757-1834); the artist is less easy to identify, but could have been Anthony Stewart (1773-1846). 32503

The Author's Copy

5. **Barclay, John** (1758-1826). A series of engravings representing the bones of the human skeleton with the skeletons of some of the lower animals. 2 volumes in one, folio (varying sizes: 353

x 261 mm and 363 x 261 mm). 36 engraved plates (32 numbered and 4 additional plates). Edinburgh: printed for E. Mitchell, 1819-1820. 19th century blind-stamped calf (rebacked). The author's copy, with his bookplate. Gift inscription on flyleaf. \$3750

First Edition, The Author's Copy. Barclay was one of the most distinguished teachers of anatomy in Edinburgh during the first decades of the 19th century. He taught mostly at his private anatomy school from 1797 until 1825. During the winter sessions Barclay taught anatomy, physiology and surgery, while in the summer sessions he taught comparative anatomy.

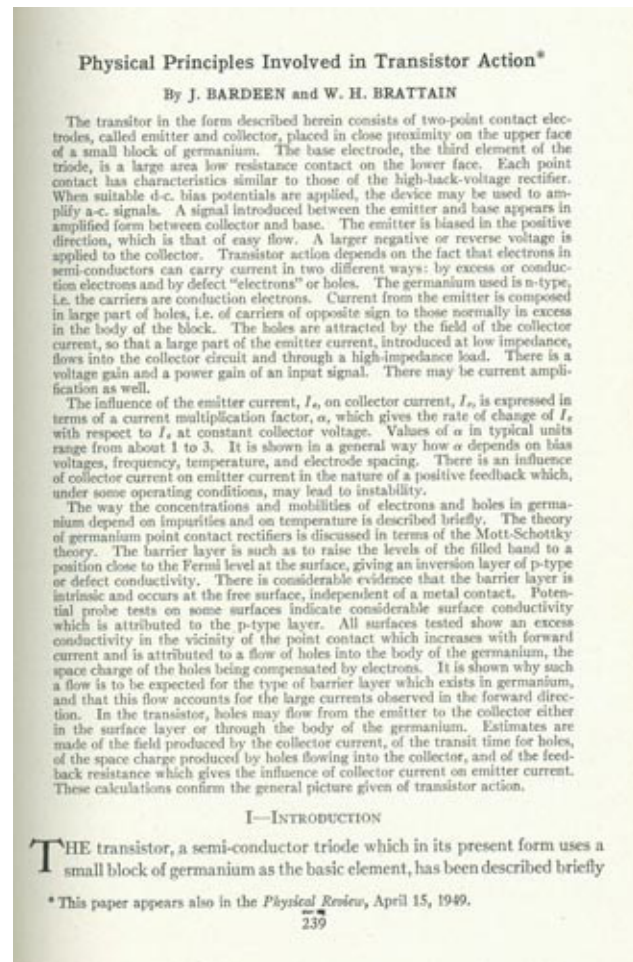
When Barclay retired from teaching his classes were taken over by his partner Robert Knox, who would later gain notoriety and ruin as a purchaser of bodies from resurrectionists/criminals Burke and Hare. The work was published in two parts, part one being issued in slightly smaller format. Most of the plates for this work were based on prior atlases, and the source is given in the heading of each plate: Albinus for human standing skeletons, horses from George Stubbs, most images of bones from Sue's French translation of Monro's osteology. The last three unnumbered plates are a prospectus for a work on vertebrate skeletons which Mitchell never published, including a striking image of an elephant with a skeleton elephant driver, or mahout. 40090

The Transistor; Foundation of Modern Cryptography

6. (1) **Bardeen, John** (1908–91) and **Brattain, Walter** (1902–87). Physical principles involved in transistor action. In *Bell System Technical Journal* 28, no. 2 (April 1949): 239–77. (2) **Shockley, William** (1910–89). The theory of p-n junctions in semiconductors and p-n junction transistors. In *ibid.*: 435–89. (3) **Shannon, Claude** (1916–2001). Communication theory of secrecy systems. In *ibid.*: 656–715. Whole volume. iv, 753, [1], v–viii pp. Illustrated. 221 x 148 mm. Library buckram. Very good. Library stamps and label on endpapers.

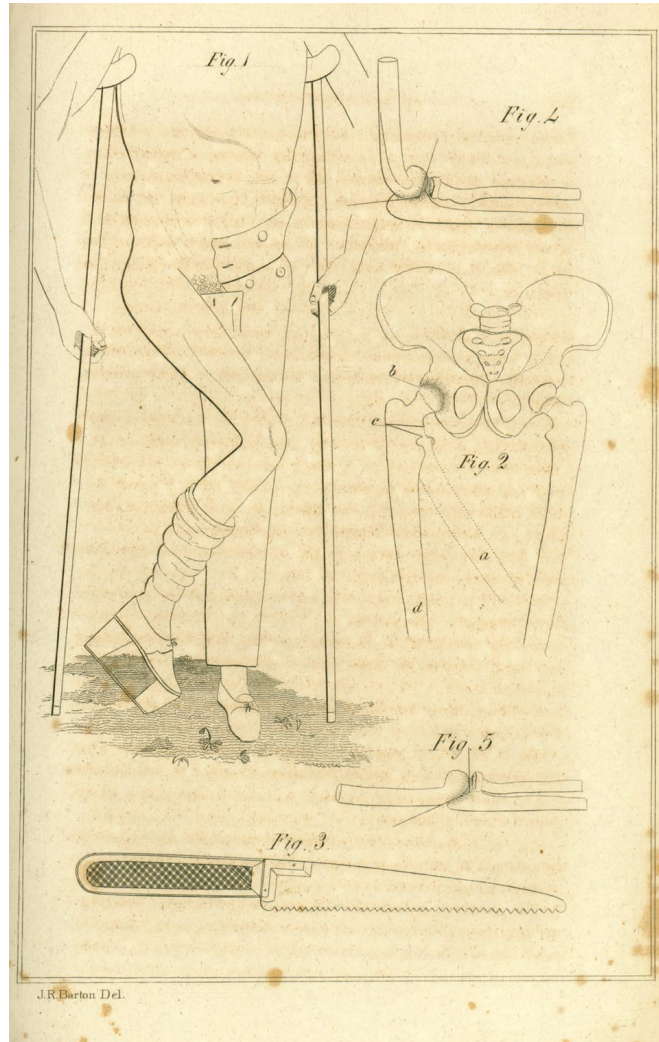
\$1750

(1) **First Editions.** No. (1), Bardeen and Brattain's paper, is the first comprehensive report on the point-contact transistor, created in December 1947 and announced in three brief papers published in the *Physical Review* in 1948. The transistor gradually replaced the bulkier vacuum tube, allowing heat reduction and miniaturization of electronic devices. Transistors began to be employed on a large scale in computer manufacturing in the late 1950s; they were eventually miniaturized and incorporated into microprocessors. Bardeen and Brattain shared the 1956 Nobel Prize for physics with William Shockley (see below) for their investigations of semiconductors (the materials of



which transistors are made) and for their discovery of the transistor. *Origins of Cyberspace* 450.

No. (2) is a detailed account of the junction transistor invented by Shockley shortly after Bardeen and Brattain's invention of the point-contact transistor. Shockley's design marked a substantial improvement over the point-contact transistor, whose "delicate mechanical configuration would be difficult to manufacture in high volume with sufficient reliability" (Computer History Museum, "The silicon engine: A timeline of semiconductors in computers" [internet reference]). Shockley disagreed with Bardeen and Brattain's explanation of how the transistor worked, claiming that "positively charged holes could also penetrate through the bulk germanium material—not only trickle along a surface layer. Called 'minority carrier injection,' this phenomenon was crucial to operation of his junction transistor, a three-layer sandwich of n-type and p-type semiconductors separated by p-n junctions. This is how all 'bipolar' junction transistors work today"



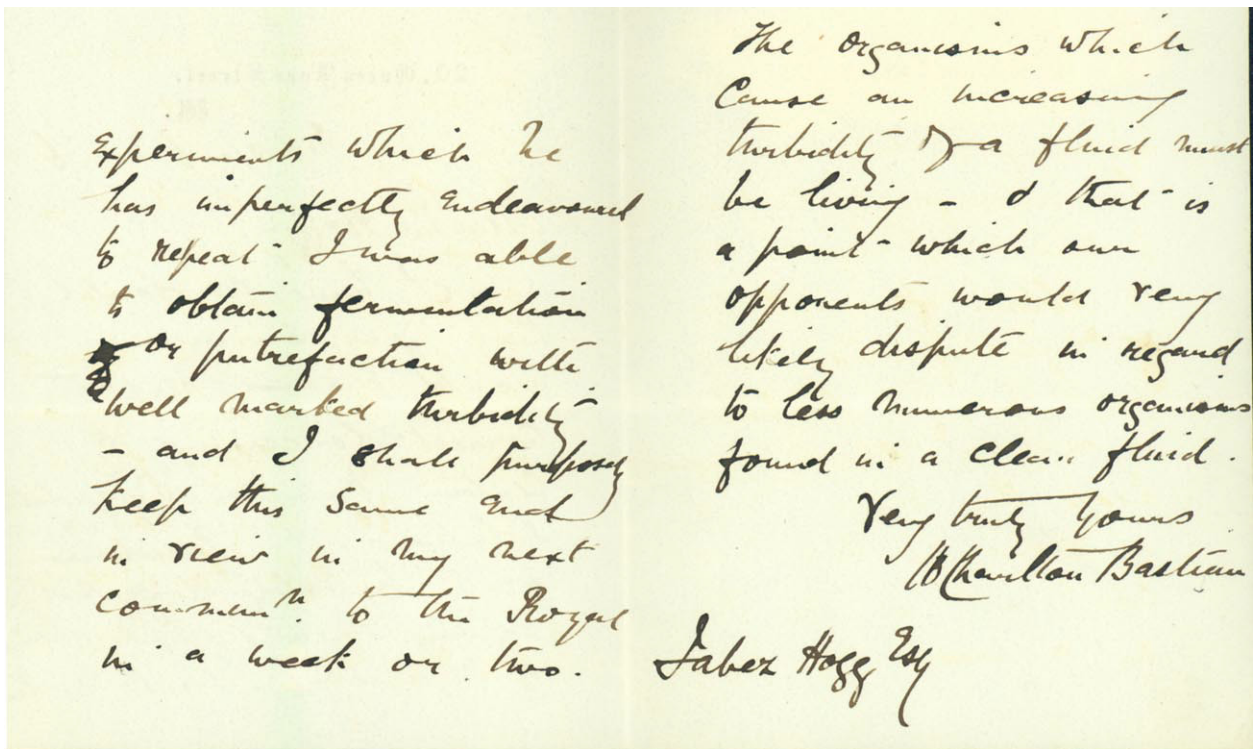
(*ibid.*). Bell Laboratories began manufacturing junction transistors in quantity in 1951; they dominated the market for many years. Magill, *Nobel Prize Winners: Physics*, pp. 675-704.

No. (3), Shannon's discussion of cryptography from the viewpoint of information theory, "is one of the foundational treatments (arguably *the* foundational treatment) of modern cryptography. It is also a proof that all theoretically unbreakable ciphers must have the same requirements as the one-time pad [a secret random key used only once]" (Wikipedia). Shannon published an earlier version of his cryptography research in the classified report *A Mathematical Theory of Cryptography* (Memorandum MM 45-110-02, Bell Laboratories, Sept. 1, 1945). Shannon, *Collected Papers*, no. 25. 40610

First Successful Artificial Joint

7. **Barton, John Rhea** (1794-1871). On the treatment of ankylosis, by the formation of artificial joints. In *North American Medical and Surgical Journal* 3 (1827): 279-292; plate. Whole volume, 8vo. vii, [1], [v]-vi, 432pp. 2 plates. 210 x 133 mm. 19th century half calf, marbled boards, leather spine label. Fine apart from occasional light foxing. From the Svenska Läkaresällskapets Bibliotek, with the library's 19th century stamp on the title. \$2500

First Edition. Barton, a Philadelphia surgeon, was the first to create an artificial joint as a remedy for ankylosis (solid fusion of a joint). "His conception of an operation to restore motion to a fused hip joint was



brilliant. His patient was a twenty-one-year-old sailor who had been injured in a fall on shipboard in which he sustained an injury to the right hip. The hip became stiff in a position of flexion and adduction. Barton reasoned that if he divided the bone and persisted in moving the osteotomy site during the convalescent period that a pseudoarthrosis [false joint] would develop, the ends of the bone becoming covered with fibrocartilage and held together by a fibrous capsule. This complication of diaphyseal fractures was well known to the surgeons of the day” (Peltier, p. 245). The success of Barton’s operation paved the way for the use of osteotomy to correct joint deformities and preserve joint motion, eventually leading to modern artificial joint surgery. *Rare*. This is the first copy we have offered in 40 years of trading. Peltier, *Orthopedics*, pp. 245-46. Garrison-Morton 4451. 40849

“I Was Able to Obtain Fermentation or Putrefaction with Well Marked Turbidity”

8. **Bastian, Henry Charlton** (1837-1915). Autograph letter signed to **Jabez Hogg** (1817-99). [London,] March 6, 1876. 3pp. 114 x 90 mm.

Traces of mounting on blank verso of second leaf, but fine otherwise. \$750

From Henry Bastian, a physician who made notable contributions to the emerging specialty of clinical neurology, and a pioneer writer on theories of the origin of life; to Jabez Hogg, ophthalmologist, microscopist and early adopter of the germ theory of disease.

Bastian published important papers on aphasia (see Garrison-Morton 4622, 4629) and was the first to demonstrate “Bastian’s law”: that complete section of the upper spinal cord abolishes reflexes and muscular tone below the level of the lesion. Bastian is best known, however, for his defense of the doctrine of spontaneous generation (abiogenesis) in the face of accepted scientific opinion. In opposition to Pasteur, Koch, Tyndall and other bacteriologists, Bastian argued that there was no fixed boundary between organic and inorganic life, stating that “since living matter must have arisen from nonliving matter at an early stage in evolution, such a process could still be taking place” (*Dictionary of Scientific Biography*). He can thus be seen as one of the first to consider the question of the origins of life from a scientific standpoint. Some of Bastian’s experimental work in support of his views on abiogenesis (contrary to his intent) ended up advancing the progress of bacteriology. It was Bastian,

for example, who showed that boiling did not destroy all bacteria, a finding that led to the discovery of heat-resistant spores.

Bastian's letter to Hogg critiques the findings of John Tyndall, whose recent experiments had shown that air from which all dust and floating particles had been removed was incapable of generating bacterial life. The letter reads in part as follows:

I have no doubt that your surmises would prove perfectly correct concerning a certain number of Tyndall's solutions. Freedom from turbidity does not by any means imply absence of organisms—but in the experiments which he has imperfectly endeavored to repeat I was able to obtain fermentation or putrefaction with well marked turbidity . . .

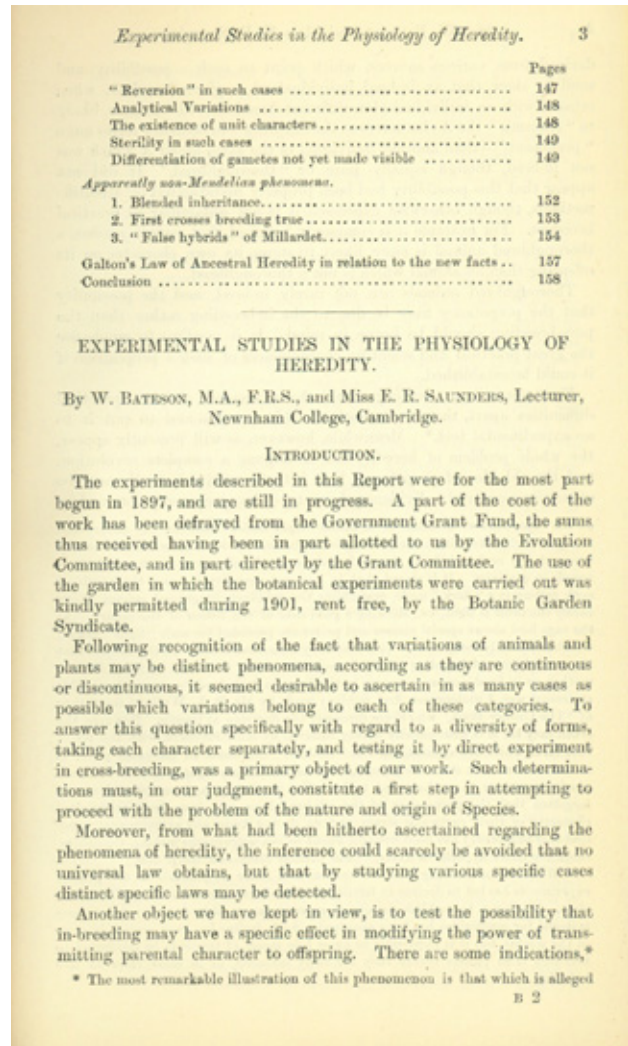
Tyndall had undertaken his experiments specifically to discredit Bastian's theories of spontaneous generation. *Oxford Dictionary of National Biography. Dictionary of Scientific Biography.* 40225

Introduction of Genetics Terminology

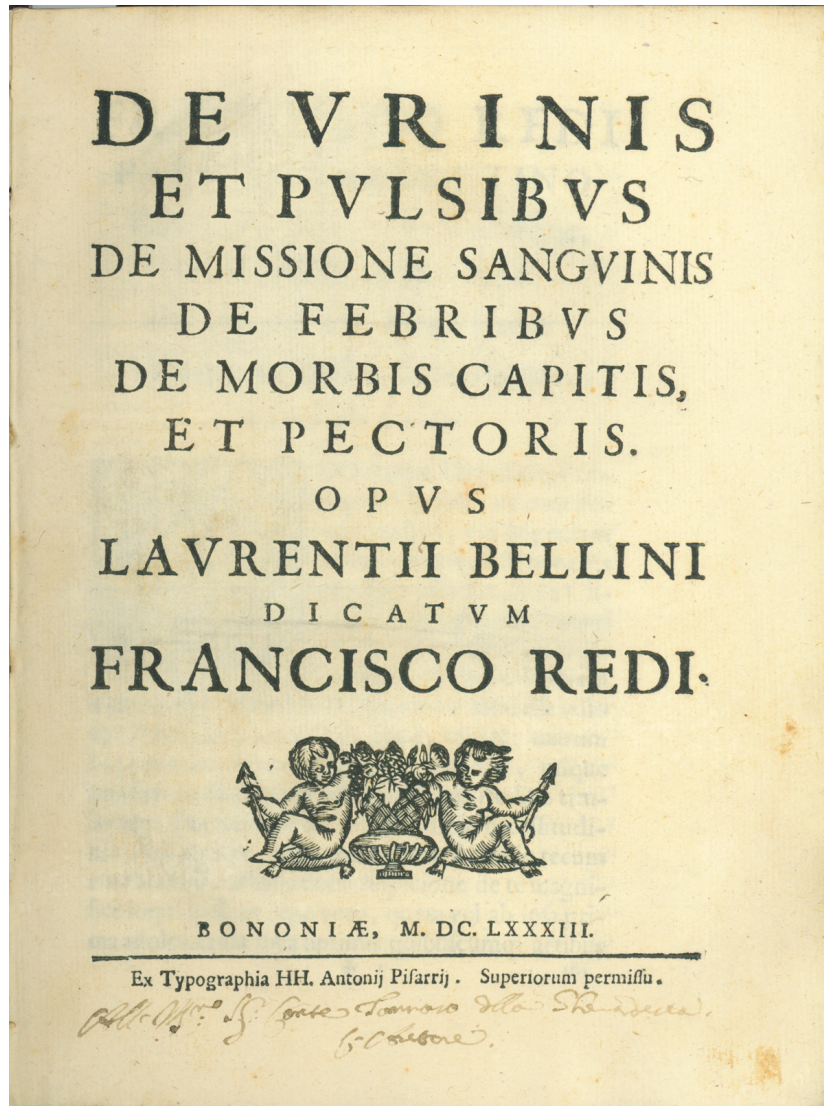
9. Bateson, William (1861-1926) *et al.*

Reports to the Evolution Committee of the Royal Society [running head: Experimental studies in the physiology of heredity]. 5 parts in 1, 8vo. 160; 154; 53 [1]; 60; 78 (of 79)pp., *lacking last leaf of part 5* (part 5 does not contain any contributions by Bateson). 2 (of 3) plates, folding table, all in part 5. [London: Harrison & Sons, 1902-9]. 208 x 134 mm. Library buckram, original printed front wrappers (a little stained and frayed) bound in at the back. Very good. Library stamps and markings (Bedford College) on front endpapers and wrappers. \$1500

Rare First Editions of these reports, which helped to lay the foundations for analysis of the mechanism of transmission of hereditary characteristics. The reports "contain the detailed results of breeding experiments by Bateson and his collaborators, Miss E. R. Saunders, and, later, R. C. Punnett, C. C. Hurst, Florence M. Durham, L. Doncaster, and others. Mendel's rules were confirmed and extended in a number of different plate species, and the first 'Mendelian' characters



in animals (poultry) were reported. . . . In Bateson's introduction to Report No. 1 (1902, p. 12) we find the clear recognition of the essence of Mendelism [i.e. discontinuity]" (Dunn, *Short History of Genetics*, pp. 65-66). At the end of this report Bateson introduced the genetics terminology—allelomorph, heterozygote, homozygote, etc.—that is now in use today (Bateson was also responsible for the name "genetics," which he first used in a book review published in 1906). The fifth report (1909), which does not contain any contributions by Bateson and does not bear his name, is incomplete in this set, lacking the last leaf (containing corrigenda for part 4) and a plate. Stubbe, *History of Genetics*, pp. 272-72. 40684



*Inscribed Presentation Copy of a
Seventeenth-Century Cardiology
Classic—Exceptionally Rare*

10. **Bellini, Lorenzo** (1643-1704). *De urinis et pulsibus de missione sanguinis de febris de morbis capitis, et pectoris*. 4to. [20], 606 [i.e., 608]pp. Woodcut ornaments. Bologna: ex typographia HH. Antonij Pisarrij, 1683. 216 x 161 mm. Vellum c. 1683, title hand-inked on spine. Leaf Aaaa2 torn and repaired at an early date without loss of text, otherwise a fine copy. *Presentation copy from the author, inscribed at the foot of the titlepage: "All'*

Illmo Conte Tommaso della Gherardesca.
l'Autore."

\$7500

First Edition, Inscribed by the Author. To the best of our knowledge, this is the first inscribed copy of a major seventeenth century medical classic that has been on the market in more than a decade. Bellini, professor of anatomy and medical theory at Pisa, was one of the Italian founders of iatromechanics, a system that framed physiologic events such as the circulation of the blood in terms of mathematical and physical principles. Bellini's *De urinis et pulsibus* represents one of the first attempts to systematically apply iatromechanics to medical theory. "William Harvey's theory of the circulation was of fundamental importance to Bellini and other proponents of iatromecha-

nism. Bellini asserted that good health depended on optimal function of the circulation of the blood, and that disease was a manifestation of an inefficient circulation. Rejecting ancient humoral pathology, he viewed blood as a physical fluid with specific properties that could be interpreted in terms of mathematical and physical principles. . . . Bellini emphasized that disease was often due to alterations in the elasticity or ‘tone’ of the solids, or in the density of the fluids which hindered their motion. This, in turn, could cause local congestion or stagnation. Bellini’s enthusiastic support of therapeutic bleeding reflected this pathophysiological concept. He tried to prove that this phlebotomy increased the velocity of the circulation, thereby washing away ‘morbid matter’ and restoring health” (Fye, pp. 181-82).

In the book’s section on diseases of the chest, Bellini reported “several forms of heart disease, especially of the syncopal type . . . in his book *De urinis et pulsibus*, Bellini discusses the state of the coronary arteries and admits that the condition which he calls ‘pressio’ is dangerous and may cause the contraction of the heart to be abolished (p. 541). He also has in mind external pressure by tumors, fat and so on. However, an intra-arterial coronary impediment of blood-flow by calcification was clearly described by this author. Bellini reported on a patient who died of a condition similar to the clinical picture of coronary disease as we now understand it, in whose coronary arteries he found a ‘stone.’ It seems quite reasonable to deduce that Bellini saw in the post-mortem a coronary occlusion” (Leibowitz, *History of Coronary Heart Disease*, p. 71).

Bellini’s work is also important in the history of urology, as it marks the first important contribution to the chemical analysis of urine. Recognizing the value of urine as a diagnostic aid, Bellini insisted on its chemical analysis in pathologic conditions.

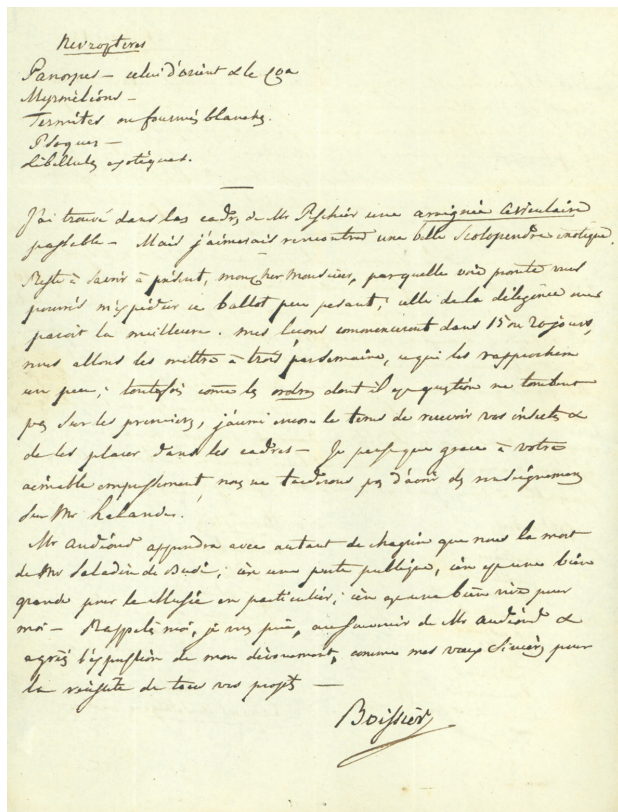
Bellini presented this copy of *De urinis et pulsibus* to Count Tommaso della Gherardesca (1654-1721), a distinguished member of an important Tuscan aristocratic family and as such a likely patron of scientific and medical research at the time. Gherardesca was appointed bishop of Fiesole in 1702 and archbishop of Florence in 1703; he also founded the Seminario Maggiori di Firenze in 1712. The rarity of this inscription by Bellini cannot be overestimated. This is the first inscribed book by Bellini we have seen on the market in more than 40 years and it is also the first inscribed

copy of a major seventeenth century classic on any aspect of medicine that we have seen on the market in more than a decade, possibly longer. In addition this copy is clearly in the original binding in which it was presented, and with the exception of one leaf, which was inexplicably torn through and repaired, the copy is in fine, even very fine condition for a work of this period. Garrison-Morton 762.1, 4162. Fye, “Lorenzo Bellini,” *Clinical Cardiology* 20 (1997): 181-82. *Dictionary of Scientific Biography*. Willius & Dry, *History of the Heart and the Circulation*, p. 64. Murphy, *History of Urology*, pp. 147-48. 40699

“Several Good Butterflies and Foreign Insects”

11. **Boissier, Henri** (1762-1845). Autograph letter signed to André Melly (1802-51). Geneva, 21 March 1822. 2pp. plus integral address leaf. 202 x 155 mm. Docketed. \$750

From Professor Henri Boissier, founder of Geneva’s natural history museum, to the young Swiss businessman André Melly, acting as the museum’s purchasing agent in England, regarding the purchase of insect specimens for the museum. Boissier informs Melly that the museum’s collections have recently been augmented “par un don de coléoptères de M. le Dr. Peschier où il y a de bonnes choses, & par un achat de quelques bons papillons & insectes exotiques que m’a procuré M. Prévost” [by a gift of coleoptera from Dr. Peschier containing some good things, and by a purchase of several good butterflies and foreign insects from M. Prévost]. This last purchase “a un peu réduit la somme que la cours avait mit à ma disposition. Je ne peut donc vous faire payer pour le moment qu’un bon de f. 400 que je vous prie d’employer, comme vous le jugerai convenable, surtout en orthoptères, hémiptères & névroptères dont nous sommes très mal fournis” [has reduced somewhat the amount made available to me from the course. At this moment I can only pay you the sum of 400 francs which I urge you to use, as you see fit, primarily for orthoptera, hemiptera and neuroptera, which we greatly lack]. Boissier lists several species of each that he wishes to acquire, including “criquets & sauter[elles] exotiq[ues]” [foreign crickets and grasshoppers] and “termites ou fourmis blanches” [termites



or white ants]. He instructs Melly to expedite the shipment of insects to him so that he will have enough time to unpack them and put them in cases.

“Dr. Peschier” may refer to Geneva native Charles Gaspard Peschier (1782-1853), a pioneer of homeopathic medicine in French-speaking countries. M. Prévost, another Genevan, was a founder of the firm of Prévost and Morris in London. Boissier’s correspondent, André Melly, ended up settling in England in 1822 (the year that this letter was written), and becoming a prominent businessman in northern England. He acted as agent to the Viceroy of India and then to the Egyptian Government, dying of fever while on a tour of the Nile in 1851. 40466

12. **Boscovich, Roger Joseph** (1711-87). A theory of natural philosophy . . . Latin-English edition, from the text of the first Venetian edition . . . with a short life of Boscovich. Folio. xix [1], 463, [7]pp. Frontispiece facsimile of the title to the 1763 Venetian edition, in red and black. Text diagrams. Chicago & London: Open Court Publishing Co., 1922. 375 x 277 mm. Original green cloth, gilt-lettered spine, a little shaken, lightly

worn at extremities and hinges. Slightly browned, but very good. \$450

First Edition in English of Boscovich’s *Philosophiae naturalis theoria redacta ad unicam legem* (first edition 1758). This translation, financed by the Yugoslavian government, was based the text of the 1763 Venetian edition, revised and enlarged under Boscovich’s supervision from the 1758 first edition. Boscovich’s *Theory* contains his law of forces, which replaced the massy corpuscles of Newtonian natural philosophy with insubstantial points possessed only of inertia and the capability of mutual interaction. Boscovich’s theory influenced the position of 19th-century field physics with regard to the relations between space and matter; it was employed by Faraday and Kelvin, and J. J. Thomson used its curve of forces to introduce the earliest concepts of atomic physics. Norman 278. See *Printing and the Mind of Man* 203 (first ed.). 40587

Signed by Francis Crick

13. **Brenner, Sydney** (1927-), **Barnett, Leslie, Crick, Francis H. C.** (1916-2002) and **Orgel, Alice**. The theory of mutagenesis. Offprint from *Journal of Molecular Biology* 3 (1961). 121-124pp. 253 x 173 mm. Original printed self-wrappers, creased horizontally. Very good copy, *signed by Francis Crick* on the front wrapper. Stamp of G. G. Meynell, co-author of *Theory and Practice in Experimental Biology* (1970). **Sold**

First Edition, Offprint Issue of Brenner and Crick’s classic paper on mutagenesis. “They distinguished two different kinds of mutagens, chemicals which induce mutations in DNA: those that induce the change of one base into another (as happens in sickle-cell disease) and those that *insert* an extra base into the DNA sequence. This latter class was called acridine mutations” (“Francis Crick” [obituary], *The Independent*, 3 August 2004). Both Crick and Brenner received the Nobel Prize in physiology or medicine, Crick for his role in discovering the double-helix structure of DNA (1962; with James Watson and Maurice Wilkins), and Brenner for discoveries concerning genetic regulation of organ development and programmed cell death (2002; with H. Robert Horvitz

THE THEORY OF MUTAGENESIS

By

S. BRENNER, L. BARNETT, F. H. C. CRICK AND A. ORGEL

Francis Crick

(C) 1961

and John E. Sulston). Judson, *Eighth Day of Creation*, p. 439. 40788

Three Important Papers by Bright, Together with Five Other Papers Cited in Garrison-Morton

14. **Bright, Richard** (1789-1858). (1) Fatal epilepsy, from suppuration between the dura mater and arachnoid, in consequence of blood having been effused in that situation. In *Guy's Hosp. Reports* 1 (1836): 36-40. (2) Cases and observations, illustrative of renal disease accompanied with the secretion of albuminous urine [part 1 only]. In *ibid.*, 338-400. (3) Observations on jaundice. In *ibid.*, 604-37. Whole volume, 8vo. [4], xii, 188, [8], 189-414, [14], 415-660, [24]pp. 29 plates (some hand-colored). London: Samuel Highley, 1836. 216 x 135 mm. Half calf, marbled

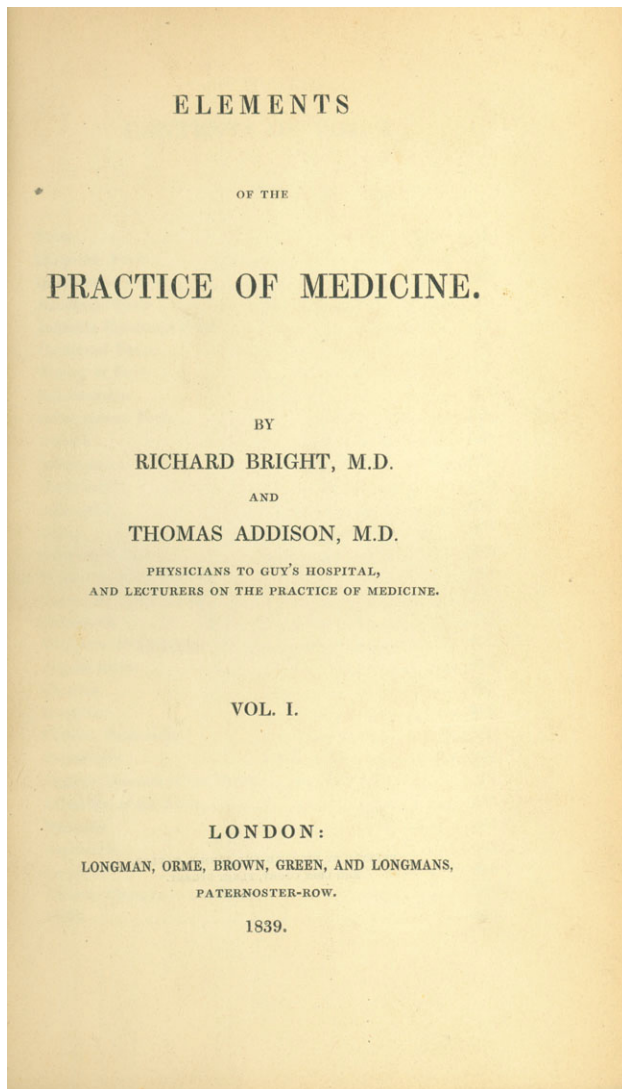
CASE 11.—*Fatal Epilepsy, from Suppuration between the Dura Mater and Arachnoid, in consequence of Blood having been effused in that situation.*

Philip Dennis, aged 37, was admitted, under my care, July 1, 1835. He was a spare thin man, who had been subject to an affection of the larynx; and was in St. Thomas's Hospital some time before, with a sore over the right eye; which, from the appearance of the scar, now perfectly healed, was probably of a syphilitic character. He was, however, in a fair state of health, so as to gain his livelihood by labour and was occupied in turning a wheel with much force, exactly one week before the time of his admission into the hospital, when, suddenly, his right arm was affected with a kind of cramp; and this feeling seemed to rise towards his face: he then fell insensible, and came to himself in about three-quarters of an hour. On recovering from the fit, he was able to raise his right hand almost as well as ever, and continued to work the whole of that day and the next; but on the following day, whilst sitting at work, he again fell in a fit; and, after being in a deep sleep for some hours, awoke very weak, but still retained the use of his arm. He remained free from any other attack for three days; but on the fourth, which was the day before his admission, about four o'clock in the afternoon, he was again attacked, and had seven fits before ten o'clock at night. Since that time the right arm had been weak, and affected with a tingling sensation, but not paralyzed. The leg of that side was free.

boards c. 1836, rebacked, a bit rubbed. Minor browning and foxing, some of the plates trimmed a little closely touching some keywords and images, otherwise very good. \$3750

First Editions of these three papers, the first containing the earliest description of unilateral ("Jacksonian") epilepsy (G-M 4811); the second representing the first part of G-M 4207, in which Bright recorded his extended observations of kidney disease; and the third containing the original description of acute yellow atrophy of the liver (G-M 3617). The second part of Bright's paper on kidney disease was published in *Guy's Hospital Reports* 5 (1840): 101-61.

Volume 1 of *Guy's Hospital Reports*, in which Bright's three papers appear, contains more Garrison-Morton citations than any other—eight in all. Besides those mentioned above, there are the following: (1) **Astley Cooper**, "Case of femoral aneurism for which the external iliac artery was tied" (pp. 43-52; G-M 2954); (2) **Cooper**, "Account of the first successful operation, performed on the common carotid artery, for aneurism, in the year 1808 . . ." (pp. 53-58; G-M 2955); **Cooper**, "Some experiments and observations on tying the carotid and vertebral arteries, and the pneumo-gastric, phrenic and sympathetic nerves" (pp.



457-75, 654; G-M 2956); (4) **Charles Aston Key**, “Femoral aneurism successfully treated by a ligature of the external iliac artery” (pp. 59-78; G-M 2957); and (5) **Thomas Wilkinson King**, “Observations on the thyroid gland, with notes on the same subject by Sir Astley Cooper,” anticipating the endocrine action of the thyroid (pp. 429-56; G-M 1126). 38075

The H. F. Norman Copy

15. **Bright, Richard** (1789-1858) and **Thomas Addison** (1793-1860). Elements of the practice of medicine. Vol. I (all published). [10], 613pp. London: Longman [etc.], 1839. 223 x 141 mm. Original blind-stamped black cloth, rebacked

preserving original gilt-lettered spine. Very good copy. The Haskell F. Norman copy, with bookplate. \$2750

First Edition. Bright and Addison were joint lecturers in medicine at Guy’s Hospital when they produced their textbook of general medicine; a projected second volume was never published. The book contains concise descriptions of over sixty diseases and conditions, and includes the first accurate account of appendicitis. According to records in the Longman Archive at the University of Reading, Bright and Addison’s work was first published in three parts between 1836 and 1839, which were then issued together as Volume I of what was intended to be a larger work. About 240 copies of the volume were sold by Longman, who published the work on commission from the authors. Very scarce. Garrison-Morton 2215. 40799

Discussing Broca’s “Traité des tumeurs”

16. **Broca, Paul** (1824-80). Autograph letter signed, in French, to an unidentified colleague (“Cher et savant confrere”), dated 15 Feb. 1867. 3pp. 128 x 102 mm. Creased horizontally, mounted. Accompanied by a halftone reproduction of a photographic portrait of Broca.

\$650

Correcting a misunderstanding that had arisen during a conversation about Broca’s *Traité des tumeurs* (1866-69):

Je serais désolé qu’il restait dans votre esprit le moindre doute sur la nature de notre conversation d’aujourd’hui. Vous vous souvenez sans doute qu’en abordant je vous ai remercié de votre article, puis que je suis allé chercher le livre que je voulais consulter, et qu’enfin, à mon retour, vous retrouvant avec notre ami commun M. R, j’ai repris langue avec vous et que c’est vous qui avez bien voulu remettre la conversation sur mon traité du tumeur. C’est alors que, me souvenant des reproches que m’avait jadis adressé M. R sur mon ardeur trop passionnée pour le [---], j’ai fait allusion au jugement inverse que vous aviez récemment porté sur moi, avec une bienveillance égale à la sienne. Dans cette conversation, j’ai parlé comme je pensais, suivant mon habitude, mais je

Dans cette conversation j'ai parlé
 comme je pensais, suivais mon
 habitude, mais je suis très bien loin
 d'avoir eu l'intention de vous demander
 une rectification quelconque. Or,
 votre obligeante lettre de ce soir me
 fait craindre que vous m'ayez
 attribué cette pensée, qui n'était
 certainement pas dans mon esprit.
 J'ai eu deux, sur ce savoir
 certain, vous donner cette petite
 explication; et j'y tiens d'ailleurs
 l'occasion de vous exprimer mes
 sentiments d'estime et d'affection
 Broca

suis certes bien loin d'avoir eu l'intention de vous
 demander une rectification quelconque. Or, votre
 obligeante lettre de ce soir me fais craindre que
 vous m'ayez attribué cette pensée, qui n'était cer-
 tainement pas dans mon esprit.

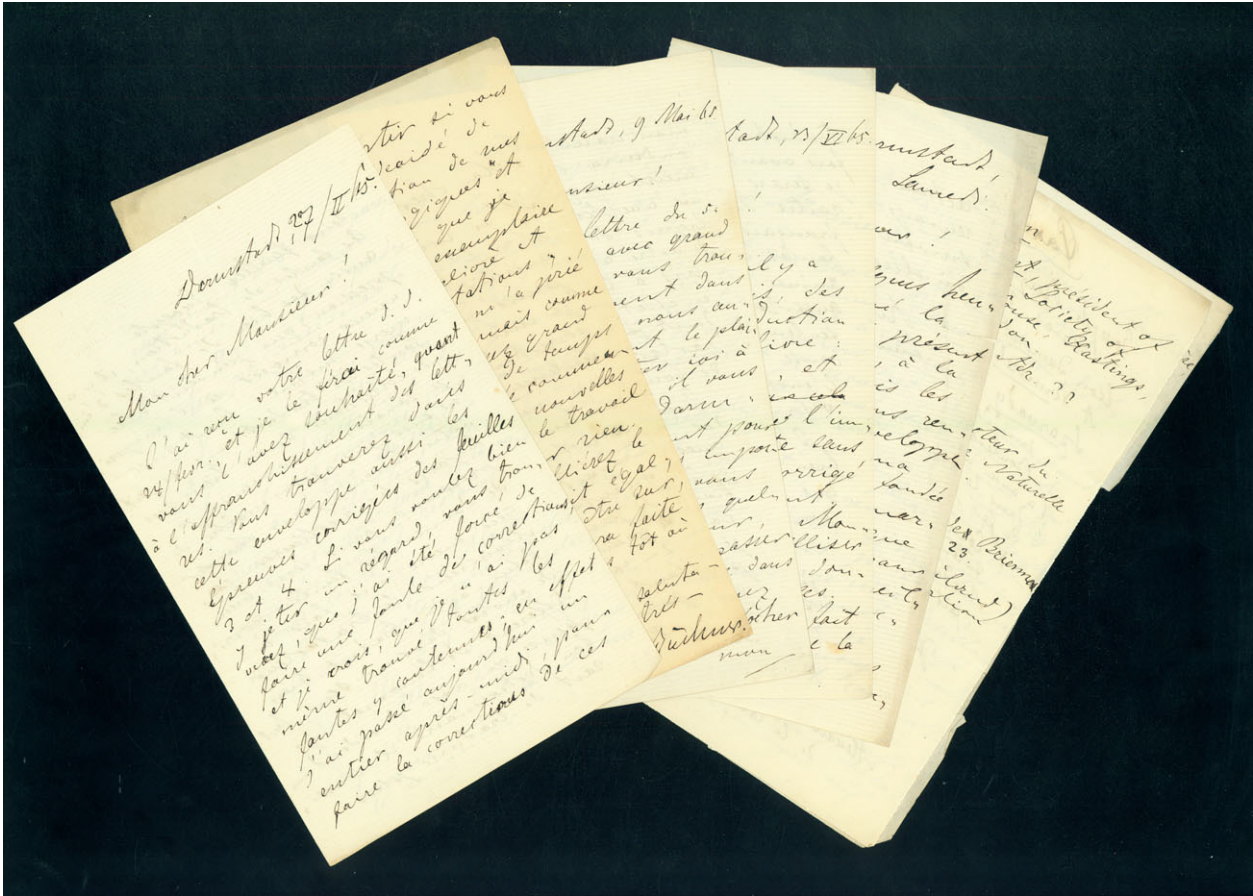
[I would be sorry if there remained in your mind
 the least doubt about the nature of our conversa-
 tion today. You undoubtedly remember that
 when I met you I thanked you for your article,
 then went to look for the book that I wanted to
 consult, and that finally, finding you with our
 mutual friend M. Raige [?], I began talking with
 you again and that it was you who agreed to post-
 pone the conversation on my treatise on tumors.
 At this point in time, remembering that M. Raige
 had formerly reproached me on my excessive
 enthusiasm for [---], I referred to the opposing
 judgment that you had recently so kindly related
 to me. In this conversation I spoke as I thought, as
 is my practice, but I am certainly far from intend-
 ing to ask you for an unspecified correction. How-
 ever, your kind letter of this evening makes me
 fear that you attributed this thought to me, which
 was certainly not in my mind.]

une page sur le papier
 et déterminé au
 comm - et the weather
 in London had totally
 attend -
 to head the highest tide
 in the most favorable
 wind direction and
 the opportunity that
 nature could give -
 J. M. Smith
 MS40732

Broca is best known for his contributions to neurology,
 including his role in the discovery of cortical localiza-
 tion in the brain, as well as for his pioneering work in
 physical anthropology. However, he also wrote exten-
 sively on pathology during the early part of his scien-
 tific career. *Dictionary of Scientific Biography*. 38730

*Launching the "Leviathan," Later
 Renamed the "Great Eastern"*

17. **Brunel, Isambard Kingdom** (1806-59).
 A.L.s. to an unidentified recipient, probably Lat-
 imer Clark. N.p., February 2, 1858. 2pp. 184 x
 115 mm. Small hole punched in upper margin.
 Provenance: Latimer Clark. \$950



Brunel, perhaps the most celebrated British engineer of the nineteenth century, designed and supervised the construction of the Great Eastern, by far the largest steamship of its day. Although too big to be commercially successful, the ship proved to be well suited for the laying of submarine telegraph cables, beginning in 1865 and 1866 with the second and third Atlantic cables. Brunel's letter was written a few days after the Great Eastern's maiden launch on January 31, 1858; it thanks the recipient (probably Latimer Clark) for his "assistance in telegraphing me the weather" and states that "we had the highest tide and the most favourable wind." The letter is partly illegible: Brunel suffered a breakdown in health on the day that the ship was launched, which may account for this. Pencil annotations on the first page of the letter, made by Clark, read "Floating the 'Leviathan' afterward called the 'Great Eastern' LC 1877." *Origins of Cyberspace* 132. 40732

On Preparing the French Edition of his "Aus Natur und Wissenschaft"

18. **Büchner, Friedrich Karl Christian Ludwig** (1824-99). 6 autograph letters signed (5 in French, 1 in German) to the publisher Germer Baillière, plus autograph list most likely of potential recipients or reviewers. 19pp. total. Darmstadt, 15 December 1865 – 24 June 1865 (last letter dated through internal evidence). 223 x 140 mm. Some minor fraying and tiny tears along folds, otherwise very good. \$2500

From Ludwig Büchner, one of the founding fathers of materialist philosophy and the author of *Kraft und Stoff* (1855; see *Printing and the Mind of Man* 338), in which he insisted that all natural phenomena, whether organic or inorganic, resulted not from some supernatural "vital spark" but from the actions of physico-mechanical forces alone. Büchner "was the most uncompromising representative of this school.

The thesis pursued in his 'Force and Matter' is that thought is as much an emanation of the brain as bile is an emanation of the liver. The mind and the spirit are products of an animal organism in the same way as motion is a product of a steam-engine" (*Printing and the Mind of Man*). In the aftermath of the Revolution of 1848 Büchner's ideas were considered dangerously radical and he was forced to resign his lectureship at the University of Tübingen. "The kind and extent of the polemic conducted becomes evident on reading the Preface and Notes in subsequent editions of *Kraft und Stoff*, as well as the collection of essays *Aus Natur und Wissenschaft* (1862)" (*Dictionary of Scientific Biography*).

Büchner's letters to the Germer Baillière firm deal with preparation of the French translation of *Aus Natur und Wissenschaft*, issued in 1866 under the title *Science et nature*. Among the topics discussed in the letters are Büchner's ongoing corrections to the proofs, which he found to be full of errors; his complaints about the French translator ("he has translated many notes in a sense quite different from the original; I think that with the help of a good dictionary he will succeed in translating more exactly"); and the possibility of Germer Baillière publishing his "Esquisses physiologiques"—a project that evidently fell through, since we can find no further record of it. Accompanying the letters is a list in Büchner's hand containing the names of several people organized by city (Paris, Caen, London, Rouen, Toulouse, Milan), presumably possible recipients or reviewers of Büchner's book. Among those listed are Dr. James Hunt, president of the Anthropological Society of London; Dr. Victor Cornil, author of *Manuel d'histologie pathologique* (see Garrison-Morton 2300); liberal journalist Frederic Szavardy, correspondent for the *Gazette de Cologne*; and socialist newspaper editor Auguste Vermorel, founder of the *Courrier Français* and *La jeune France*. 2204

"I Shall Present a Notice of my Evidence of Identification, to the Geol. Soc. next Wednesday"

19. **Buckland, William** (1784-1856). Autograph letter signed to Charles Stokes (1783-1853). N.p., 27 Oct. 1836. 3pp. 228 x 187 mm. Small marginal lacuna where seal was broken, light

dampstaining along central fold, seal reinforced with clear tape. \$2750

Letter with excellent scientific content from geologist and paleontologist William Buckland, founder of the Oxford school of geology and author of the best-selling *Reliquiae Diluvianae* (1823), which promoted a catastrophist version of Earth's history marked by "discontinuous assemblages of organic life being created and dying out" (*Dictionary of Scientific Biography*). Buckland's letter discusses a significant geological discovery—the relationship between the New Red Sandstone strata in England and in Chemnitz, Germany, based on samples of petrified wood found in both regions.

Many thanks for your letter rec'd at Bristol — I was sorry to miss you in the 1/2 day I was in London last week. I write to ask if you have rec'd from Revd. Mr. Bree of Allesley near Coventry some polished thin slices of silicified wood which he promised me to send up to you. I was at Allesley last week whither I have been longing to go for the last 10 years & have ascertained that the matrix from which the silicified wood in the gravel & on the surface of the fields of that district has been derived is the lower region of the New Red Sandstone — this discovery is very important in its relation to the equivalent strata near Chemnitz.

Chemnitz is the site of a Permian-era petrified forest, remarkable for its "outstanding three-dimensional preservation of particularly large fossil remains, made possible by siliceous permineralization, [which] provides the opportunity to study the gross morphology, anatomy and internal organization of plant tissues in a way not allowed by other preservational states" (Lucas et al., p. 8). Bree's samples from Allesley were apparently of a similar nature.

I shall present a notice of my evidence of identification, to the Geol. Soc. next Wednesday & I shall be glad to transfer to yourself & Brown the examination & description of the nature of the fossil woods of Allesley. I recognized in Bree's collection which is very large, none of the palms and Dendrolites of Cotton and Sprengel all appeared to be nearer to Coniferae but in the greater no. the annular rings of growth were very obscure. If you have received Bree's packet I wish you wd. get ready by Wednesday a short Notice on its contents to be read after my paper which I concluded

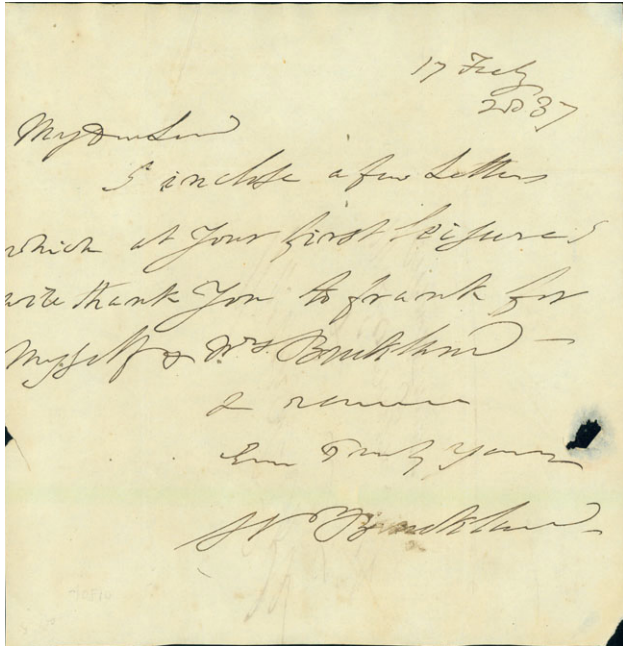
If you have received *Brook's Papers*
 I wish you wd get ready by
 Wednesday a short Notice on
 its contents to be read after
 my paper - which I will conclude
 with saying, if you will
 permit me, that you & R.
 Brown have undertaken the
 botanical examination of
 the nature of the fossil
 plants found in this locality
 I shall also have a notice on the
 existence of Keuper in several
 parts of Britain
 Mr Buckland is with
 kindest regards
 with yours always
 W. P. Buckland
 Wm. Buckland

with saying, if you will permit me, that you & R. Brown have undertaken the botanical examination of the nature of the fossil plants found in the locality. . . .

“R. Brown” refers to botanist Robert Brown (1773-1858), best known for naming the cell nucleus and for being the first to observe the seemingly random movement of particles suspended in a liquid or gas — what we now call Brownian motion. Brown’s investigations of the cellular tissues of fossilized woods are noted in Buckland’s *Geology and Mineralogy Considered with Reference to Natural Theology* (1836), published the same year this letter was written. Rev. William Thomas Bree (1786-1863), vicar of All Saints’ church in Allesley, was a noted observer of all aspects of natural history who wrote many articles and letters on local plants, insects and bird life, a large number of which were published in *London’s Magazine of Natural History* between 1829 and 1837. Buckland’s correspondent was Charles

Stokes, a stockbroker and amateur geologist who collected specimens of petrified wood.

Buckland stated in his letter that he would present his “notice of my evidence of identification” to the Geological Society on the following Wednesday (Nov. 1); however, he did not do so until December 14 (see *Proceedings of the Geological Society of London* 2 [1838]: 439). Buckland’s paper, titled “On the Occurrence of Silicified Trunks of Large Trees in the New Red Sandstone Formation of Poikilitic Series, at Allesley, near Coventry,” was followed by “Further Notice on a partially Petrified Piece of Wood from an Ancient Roman Aqueduct at Eilsen, in the Principality of Lippe-Buckeberg,” by Stokes. Lucas et al., “Non-Marine Permian Biostratigraphy and Biochronology: An Introduction,” *Geological Society, London, Special Publications* 265 (2006): 1-14. 40462

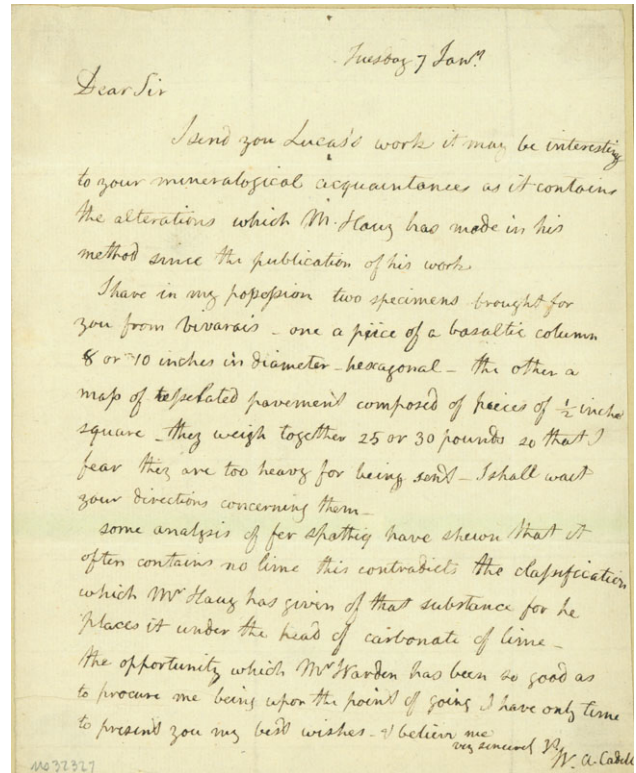


"I inclose a few letters"

20. **Buckland, William** (1784-1856) Autograph note signed to Viscount [William Willoughby] Cole (1807-86). February 17, 1837. 1 page, plus address on verso. 181 x 176 mm. Small hole where seal was broken, otherwise fine. \$750

Autograph note signed from geologist and paleontologist William Buckland, author of *Reliquiae Diluvianae* (1823) and the first professor of geology at Oxford University, to his former student William Willoughby Cole, known by his courtesy title of Viscount Cole until 1840, when he assumed the title of third Earl of Enniskillen. Cole, an enthusiastic amateur geologist and paleontologist, amassed one of the world's largest collections of fossil fishes, which is now at the British Museum. He served as an M.P. in the House of Commons from 1831 until his elevation to the peerage.

Buckland's note reads "I inclose a few letters which at your first leisure I will thank you to frank for myself and Mrs. Buckland." As a Member of Parliament Cole enjoyed franking privileges (free postage), which he would have routinely extended to all of his friends and colleagues as was customary at the time. Buckland would have appreciated this service, since postage in



England was expensive prior to the introduction of the Penny Post in 1840. 40819

"It may be Interesting to your Mineralogical Acquaintances"

21. **Cadell, William Archibald** (1775-1855). Autograph letter signed to an unidentified recipient. N.p., n.d. (1813 or after). 1 page. 198 x 160 mm. Mounted. Very good. \$950

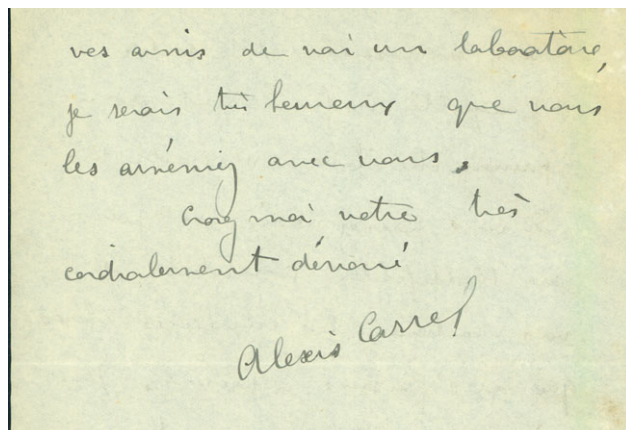
Letter with good geological content from Scottish mathematician and antiquary W. A. Cadell, discussing the recent work of French mineralogist René-Just Haüy (1743-1822), famous for "Haüy's law" stating that every crystal of precise chemical structure and purity has a specific and characteristic shape:

I send you Lucas's work it may be interesting to your mineralogical acquaintances as it contains the alterations which M. Haüy has made in his method since the publication of his work. . . .

Some analysis of fer spath[...] [iron spar?] have shewn that it often contains no lime this contradicts the classification which Mr. Haüy has given

of that substance for he places it under the head of carbonate of lime. . . .

“Lucas’s work” refers to Jean-André-Henri Lucas’s *Tableau méthodique des espèces minérales, extraite du Tableau cristallographique publié par M. Haüy en 1809* (1813). *Dictionary of National Biography*. 32327



“I will Show you the Remarkable Things that We are Doing at Present”

22. **Carrel, Alexis** (1873-1944). Autograph letter signed, in French, to an unidentified recipient. New York, 29 November 1910. 2 – 1/2 pp. 172 x 148 mm. Minor staining along fold, but very good. \$750

From Alexis Carrel, the first to succeed at cultivating warm-blooded animal cells *in vitro*, and the first to successfully transplant blood vessels and organs. “In January, 1912, Carrel transplanted heart tissue from a chick embryo into an *in vitro* culture. . . . By bathing the tissue in fresh nutrients and by discarding the used medium to ensure the elimination of waste products, Carrel and his assistants kept the culture in a living state for thirty-eight years” (Magee, I, p. 165). Carrel received the 1912 Nobel Prize in physiology / medicine for this work, most of which was carried out at the Rockefeller Institute in New York.

Carrel’s letter, written while he was at the Institute, alludes to his researches and gives an indication of how much time he devoted to his work:

Je vous remercie de votre très aimable invitation, et je serais charmé de diner mercredi soir avec

vous et M. et Mme. Vigoureux. Mais je dois vous dire franchement que jusqu’au mois de janvier mon travail m’occupera, pour ainsi dire, chaque soir. . . .

Si vous pouvez venir un jour au Rockefeller Institute, je vous montrerai les curieuses choses que nous faisons à présent. Je suis toujours libre pendant une demie heure environ, entre une heure et une heure et demi. Dans le cas où cela intéresseront vos amis de voir un laboratoire je serais très heureux que vous les ameniez avec vous.

[I thank you for your kind invitation, and would be delighted to dine with you and Mr. and Mrs. Vigoureux on Wednesday night. But I must tell you frankly that my work will occupy me every night until the month of January. . . .

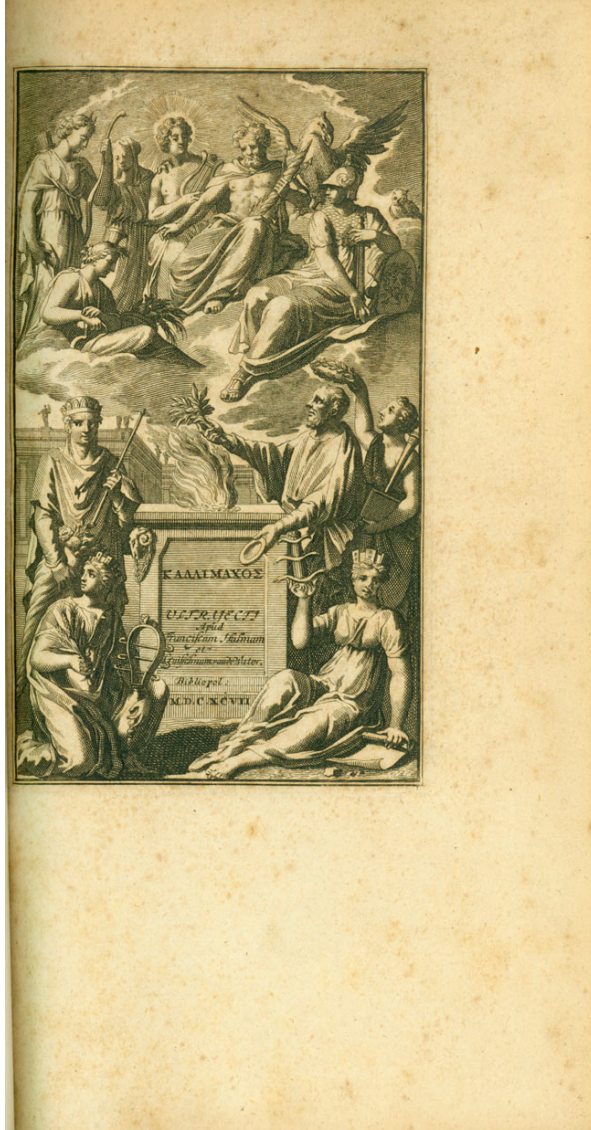
If you can come some day to the Rockefeller Institute, I will show you the remarkable things that we are doing at present. I am always free for about half an hour between one and one-thirty. If it will interest your friends to see a laboratory I would be very happy for you to bring them with you.]

Magee, ed. *The Nobel Prize Winners: Physiology or Medicine*, I, pp. 161-69. 34281

The Origin of Bibliography—Large Paper Copy

23. **Callimachus** (ca. 310-240 B.C.) *Pinakes*. In *Hymni, epigrammata et fragmenta*, ed. Theodor J. G. F. Graevius et al. (Utrecht: F. Halma and W. van de Water, 1697), pp. 350-353. 2 vols., 8vo. [32], 438, [369]-496, 24, [114]; [16] 758, [64]pp. 6 plates, engraved text illustrations. 263 x 145 mm. (large paper). Modern half calf gilt, cloth boards. Minor foxing and offsetting from plates, but very good. \$1750

Editio princeps of Callimachus’s *Pinakes* (“Lists”), the earliest library catalogue, and the origin of bibliography. Callimachus, a renowned Hellenistic poet, spent most of his life in Alexandria, where he served as director of the city’s great library and began compiling the first catalogue of its holdings. Only a few fragments of the catalogue survive, together with a scattering of references to it in other ancient works. The



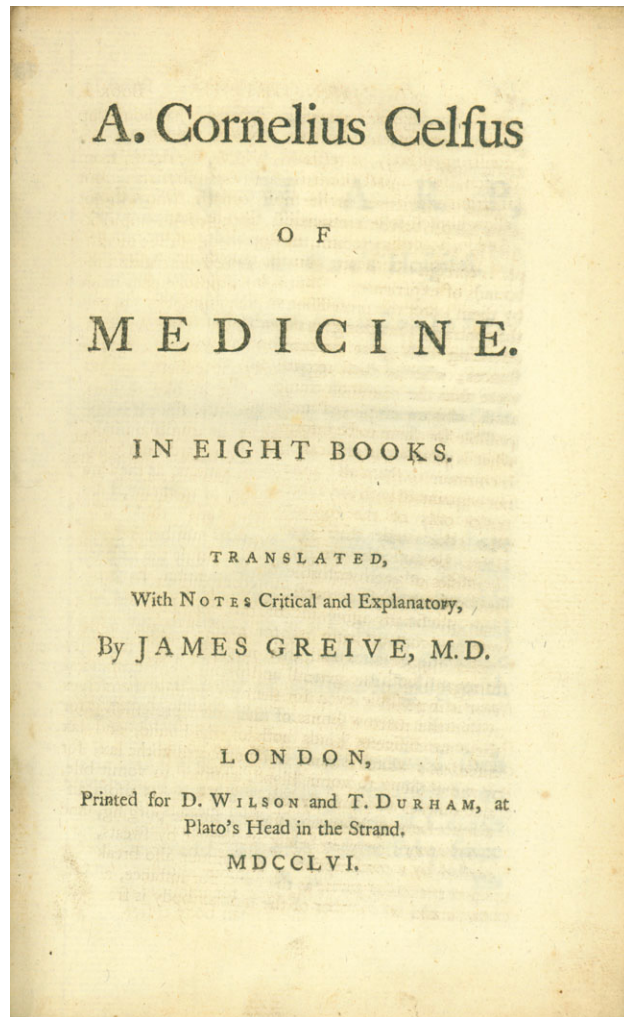
most important of these fragments is Callimachus's *Pinakes* of Greek authors and their works, which at one time filled 120 papyrus rolls and "amounted to a systematic survey of Greek literature up to the first half of the third century B.C." (Breslauer and Folter, p. 21). Callimachus's bibliographical methods would not be out of place in a modern library; an analysis of the eight fragments of the *Pinakes* that remain shows that Callimachus

1. divided the authors into classes and within these classes if necessary into subdivisions;
2. arranged the authors in the classes or subdivisions alphabetically;
3. added to the name of each author (if possible) biographical data;

4. listed under an author's name the titles of his works, combining works of the same kind to groups (no more than that can be deduced from the eight citations); and

5. cited the opening words of each work as well as
6. its extent, i.e., the number of lines (Blum, p. 152).

The first printed version of the *Pinakes* is contained in the 17th-century variorum edition of Callimachus's extant works edited by T. J. G. F. Graevius, which includes the first edition of the monumental commentary by Ezechiel Spanheim. The edition also incorporates the 420 fragments collected and elucidated by the great English classical scholar Richard Bentley, whose reading of these fragments represents "the earliest



example of a really critical method applied to such a work (*Dictionary of National Biography*). Blum, *Kallimachos, the Alexandrian Library and the Origins of Bibliography*, ch. 4. Breslauer and Folter, *Bibliography: Its History and Development*, p. 21. 40868

Origin of the Medical Term "Cancer"

24. **Celsus, Aulus Cornelius** (fl. 1st cent. A.D.). Of medicine. In eight books. Translated, with notes critical and explanatory, by James Greive, M.D. 8vo. xxxii, 519, [7]pp. London: D. Wilson and T. Durham, 1756. 208 x 131 mm. Calf c. 1756, rebaked, corners repaired, endpapers renewed. Light toning, occasional spotting, but very good. 18th century owner's signature

("George Howell January 21 1757") on the front flyleaf. \$3750

First Edition in English. Celsus' *De medicina*, written circa 30 C.E., is the oldest Western medical document after the Hippocratic writings, the earliest major medical treatise written in Latin to survive, and the first of the treatises on medicine from the ancient world to be published in English. Prior to this edition of Celsus, fragments of Hippocrates, such as the Hippocratic Oath, were translated into English, but virtually all of Hippocrates, Galen and other classical writers on medicine and surgery waited until the nineteenth or twentieth century to be translated.

Celsus remains the most important source of present-day knowledge of medicine in the Roman empire. *De medicina* was originally part of a larger encyclopedic work covering agriculture, military science, rhetoric, government, law, philosophy and medicine, but only

the eight books on medicine survived intact. Like many of the ancient classics, the text was lost during the Middle Ages, and rediscovered by humanists in the Renaissance. In this case manuscripts were discovered in 1427 in the Laurentian Library, Florence, from which the first printed edition, edited by Bartholomaeus Fontinus, was published in 1478.

While there has been much debate as to whether Celsus was truly a “physician” (a term that in ancient times referred to someone who practiced medicine for money), it is clear from the text of *De medicina* that he had considerable first-hand medical expertise. “From his writing we may conclude that his professional skills were excellent and that his knowledge of medicine was exhaustive. He was also endowed with superior literary skills. . . . His contributions to medicine are major: he wrote the first major medical treatise in Latin; he created, almost single-handedly, scientific Latin; and he wrote the first systematic review of all that was known in medicine up to his time” (Prioreshi, pp. 210-11).

Book I of *De medicina* contains a historical overview of medicine; Book II deals with the course and general treatment of diseases; Books III and IV with special therapy; Books V and VI with pharmacology (drugs and medication); Book VII with surgery; and Book VIII with bone diseases. Celsus is credited with recording the cardinal signs of inflammation: *calor* (warmth), *dolor* (pain), *tumor* (swelling) and *rubor* (redness and hyperaemia). He goes into great detail regarding the preparation of numerous ancient medicinal remedies including the preparation of opioids. In addition, he describes many first-century Roman surgical procedures which included removal of a cataract, treatment for bladder stones, and the setting of fractures.

In compiling *De medicina* Celsus drew heavily upon the Hippocratic corpus, referencing some 80 Greek medical writers, some of whom are now known only from Celsus’s work. He translated Greek medical terms into Latin, and many of these Latin terms have remained standard in medicine to the present day. Included among these terms is the word “cancer” (Latin for the Greek *karkinos* [crab]), which Celsus used to describe various types of non-malignant ulceration such as erysipelas and gangrene. In discussing malignant disease Celsus used the words *carcinoma* and *carcinode*, terms derived directly from the Greek. In his principal account of the disease (pp. 302-4 in the 1757 Greive translation),

he starts by saying that it is not very dangerous unless interfered with by injudicious treatment, but goes on to mention a more dangerous form which he describes as *cacoethes* (κακοηθες), malignant, using the Greek adjective which is often applied to the disease by Hippocrates. For this variety alone he suggests operative treatment though he gives no details.

He goes on to refer to several varieties of local superficial cancer or rodent ulcer using the terms *carcinode* and *carcinoma* and mentions the disease as occurring on the face, nose, ears, lips, corner of the eye and in the breast; he also speaks of cancerous nasal polypus and carcinoma at the umbilicus.

Celsus says nothing about internal cancer—the κρυπτοι καρκινοι known to Hippocrates and stated by him to be incurable and untreatable (Celsus, *De medicina*, ed. and trans. by W. G. Spencer [1935], vol. III, p. 592).

Dictionary of Scientific Biography. Prioreshi, *A History of Medicine*, vol. III, pp. 182-211. Garrison-Morton 21 (note). 40803

The Antiproton

25. **Chamberlain, Owen** (1920-2006), **Emilio Segrè** (1905-89) *et al.* Observation of antiprotons. In *The Physical Review*, 2nd series, 100 (1955): 947-50. Whole number. 763-979pp. 268 x 202 mm. Original printed wrappers, vertical crease in back wrapper. Boxed. \$1500

First Edition, journal issue. Segrè and Chamberlain, colleagues at the University of California, Berkeley, shared the 1959 Nobel Prize in physics for their discovery of the antiproton, a particle with the same mass and spin as the proton but with opposite charge and magnetic moment. Such antiparticles had been predicted in 1928 by Dirac’s relativistic theory of the electron, and the first such particle, the positron, had been discovered by C. D. Anderson in 1932. Several rival groups at Berkeley also entered the antiproton hunt, but the Segrè team’s experimental ingenuity insured its triumph:

I decided to attack the problem in two ways. One was based on the determination of the charge and mass of the particle. The other concentrated on

Observation of Antiprotons*

OWEN CHAMBERLAIN, EMILIO SEGRÈ, CLYDE WIEGAND,
AND THOMAS YPSILANTIS

Radiation Laboratory, Department of Physics, University of
California, Berkeley, California

(Received October 24, 1955)

ONE of the striking features of Dirac's theory of the electron was the appearance of solutions to his equations which required the existence of an anti-particle, later identified as the positron.

The extension of the Dirac theory to the proton requires the existence of an antiproton, a particle which bears to the proton the same relationship as the positron to the electron. However, until experimental proof of the existence of the antiproton was obtained, it might be questioned whether a proton is a Dirac particle in the same sense as is the electron. For instance, the anomalous magnetic moment of the proton indicates that the simple Dirac equation does not give a complete description of the proton.

The experimental demonstration of the existence of antiprotons was thus one of the objects considered in the planning of the Bevatron. The minimum laboratory kinetic energy for the formation of an antiproton in a nucleon-nucleon collision is 5.6 Bev. If the target nucleon is in a nucleus and has some momentum, the

the observation of the phenomena attendant on the annihilation of a stopping antiproton. The stopping antiproton and a proton of the target should mutually annihilate each other, and the rest mass of the two particles should transform itself in one of many possible ways into other particles such as pions. These would leave tracks in a photographic emulsion and the annihilation would thus become evident. . . .

We started the run on August 25, 1955, and after a few days of tuning up, we began observing antiproton signals. We based the identification on measurement of the velocity, momentum, and charge of a particle. The signals for velocity were oscilloscope traces recording the passage of a particle through a velocity-selecting Cerenkov detector. . . . We detected about one antiproton for every few hundred thousand other particles crossing our apparatus. . . . We decided to write a letter to the *Physical Review* and an article for *Nature*. . . . The mass-spectrograph experiment concluded on October 1, 1955, having proved the existence of the antiproton, and soon thereafter the emulsion work confirmed it (Segrè, *A Mind Always in Motion*, pp. 256-57). 40520

Wishing by the Judge Advice for
resisting an officer sent to
recover an apprentice-boy who
had been picked into his ship.
Possibly, however, he though only
indulged his feelings so far as
to tell in London how much
smuggling there was in Scotland,
thus causing the ~~revenue~~ ^{revenue} officials
a little more on the alert than
they had been before.
I am, my dear Sir,
Yours very sincerely,
R. Chambers.
Edinburgh
Home Office

MS40847

"I Can Tell You . . . That the Consumption was Very Lavish"

26. **Chambers, Robert** (1802-71). Autograph
letter signed to an unidentified correspondent.
8pp. Edinburgh, Feb. 29, 1860. 182 x 115 mm.
Light soiling along folds, otherwise fine. \$650

From the author of *Vestiges of the Natural History of Creation* (1844), the first full-length exposition in English of an evolutionary theory of biology, and the most sensational book on its subject to appear prior to Darwin's *On the Origin of Species*. Chambers's work was one of the greatest scientific best-sellers of the Victorian age, going through at least twelve large editions in England, numerous American editions, and several foreign-language translations. Chambers was also the author of numerous other works, a partner with his brother William in the publishing firm W. & R. Chambers, and a joint editor of *Chambers's Edinburgh*

Journal. He was highly influential in the mid-19th century in both scientific and political circles.

In his letter Chambers thanks his correspondent for letting him know of his election to the Athenaeum Club, “which I feel to be one of the most flattering events of my life, and a step likely to be serviceable for making my latter years pleasant.” He then goes on to discuss at length the question of how much French wine was consumed in Scotland prior to “the great change of the [customs] duties in 1763,” relating several colorful anecdotes about the Scottish thirst for French wine in the 18th century:

I can tell you . . . that the consumption was very lavish. You may judge from such a fact as this—when Lord Cockburn’s father was living with his uncle President Dundas [i.e., Scottish judge Robert Dundas, Lord Arniston (1713–1787)] at Arniston between 1750 and 1760, there were sixteen hogs-heads of claret [roughly 880 gallons] consumed in that house annually. A hogs-head contains 22 dozen. It could cost from £10 to £15 per hogs-head. . . .

. . . the Earl of Leven had all his six grown-up sons living with him at once in the house together. A hogs-head of good claret arrived, and they were all so much pleased with it, that they agreed to keep it flowing with the help of casual company. Accordingly, one or the other of them, in greater or lesser number, continued at table with such friends as came, drinking the claret, and in ten days the butt was exhausted. . . .

40847

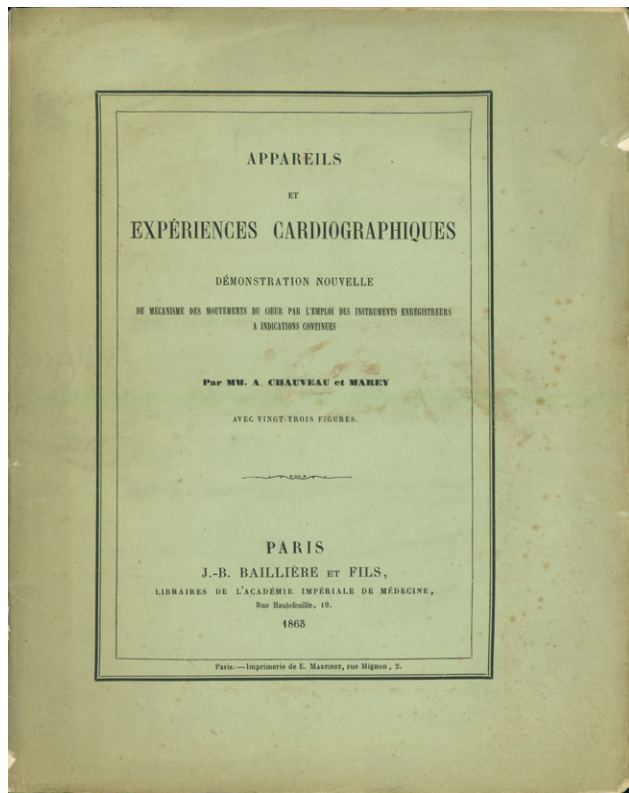
Rare Charcot Medallion by Vernon

27. **Charcot, Jean Martin** (1825-93). Docteur J. M. Charcot. Cast bronze medallion by **Frédéric Vernon** (1858-1912), together with smaller medallion of the Salpêtrière. Charcot medallion signed “F. Vernon 1883” in the metal. Charcot medallion measures 75 mm. in diameter, Salpêtrière medallion measures 54 mm. in diameter. Both medallions mounted on velvet-covered board, velvet a little worn. \$5000



Rare medallion by the noted French sculptor Frédéric Vernon, the obverse showing Charcot’s head in profile looking to the right (the reverse is blank). This is the first of two medallions by Vernon commemorating Charcot; the second medallion, made after Charcot’s death, is of gilt bronze and is slightly smaller. Jacobs, in his forward to M. E. Abbott’s *Classified and Annotated Bibliography of Sir William Osler’s Publications* (2nd ed. 1939), notes that Sir William Osler was persuaded to sit for Vernon in 1905 after being shown a medal of Charcot’s likeness—possibly a copy of this 1883 medallion.

Charcot, known as the “founder of modern neurology,” taught at the Salpêtrière Hospital in Paris for 33

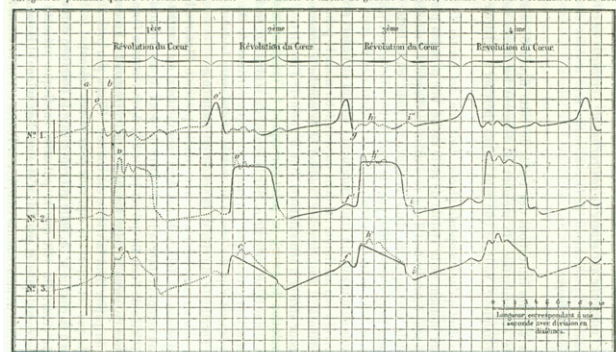


years. He is associated with at least 15 medical eponyms, including Charcot-Marie-Tooth disease (peroneal muscular atrophy) and amyotrophic lateral sclerosis. Charcot had a great influence on the developing fields of neurology and psychology, both through his own work and through that of his students, among whom were Sigmund Freud, Pierre Janet, William James, Georges Gilles de la Tourette and Alfred Binet. Storer, *Medicina in nummis*, 603. 40704

Introduction of Cardiac Catheterization to Record Changes in Intracardiac Pressure

28. **Chauveau, Auguste (1827-1917) and Marey, Étienne Jules (1830-1904).** Appareils et expériences cardiographiques. Démonstration nouvelle du mécanisme des mouvements du coeur par l'emploi des instruments enregistreurs à indications continues. Offprint from *Mémoires de l'Académie impériale de Médecine* 26 (1863). [4], 52 pages, including half-title. 23 text illustrations,

FIG. 6.
Cette figure 6 représente les tracés (n° 1) de l'oreillette, (n° 2) du ventricule, (n° 3) de la pulsation cardiaque.—Les mouvements sont enregistrés pendant quatre révolutions du coeur.— Les tracés se lisent de gauche à droite, comme l'écriture ordinaire. Nous don-



nerons l'explication des différents éléments de ces tracés en les analysant successivement dans ces quatre révolutions du coeur. A mesure qu'un des éléments des tracés sera connu, il sera marqué, pour les révolutions suivantes du coeur, par une ligne pleine, au lieu d'une ligne ponctuée.

mostly of cardiac tracings. Original wrappers, backstrip and cover edges chipped in several places, front cover and preliminaries foxed, but very good. \$2250

First Edition, Rare Offprint Issue. Marey pioneered the use of graphic methods to record physiological phenomena; his friend Auguste Chauveau, *chef de service* of physiology and anatomy at the Veterinary Institute of Lyons, was an expert on the equine cardiovascular system. Their collaboration, described as “one of the most important cooperative ventures in medical history” (Braun, p. 18), resulted in the world’s first cardiographic recording.

Chauveau’s experience in cardiac physiology combined with Marey’s skill and knowledge of instrumentation produced a revolutionary monitoring and recording technique: they radically extended the possibilities of cardiac catheterization by using it to record changes in intracardiac pressure. Experimenting on a horse (chosen because of the large size of the animal’s heart), Chauveau introduced thin rubber bulbs that Marey had fashioned into two of the horse’s heart chambers. Marey had attached each of the two bulbs to another outside the horse’s body by means of a long rubber tube and had connected each of these exterior bulbs to a stylus. As one chamber of the heart expanded, the displacement of the first bulb was transmitted to the second and to the stylus, pushing it upward against a sheet of paper wrapped around a cylinder. As the chamber contracted, the line made by the stylus descended, forming the characteristic curve of the cardiogram. The expansion and contraction of the second chamber, alternating with

that of the first, was recorded in the same way, and the result was two sinuous lines that not only showed the pressure changes in each of the heart's two chambers, but also recorded their exact sequence. With this procedure, for the first time a reliable indication was given both of the moments of contraction and distension for each heart chamber and of the order in which these changes in pressure occurred. . . .

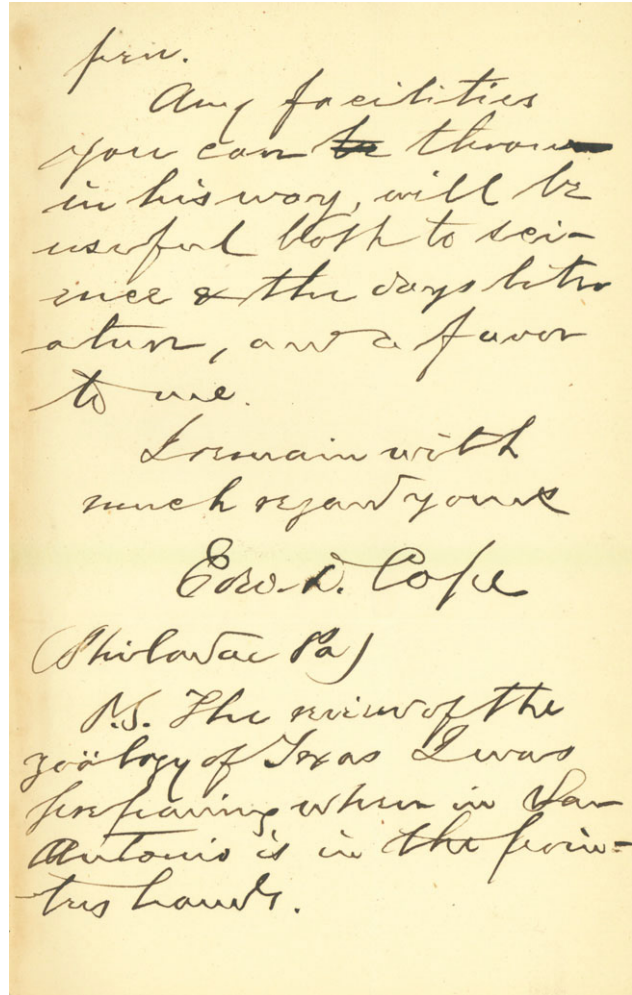
They published their cardiographic tracings in 1861 and 1862; in 1863, with improvements made to their recording procedures, they published graphs that demonstrated cardiac hemodynamics in complete detail. These remarkable tracings and the accompanying summary table of their experiments on the horse won them the physiology prize given by the Académie des Sciences that year. . . . The accuracy of their records was surpassed only in 1931 when electronic tracing of human subjects was introduced (Braun, pp. 19-20).

Braun, Marta, *Picturing Time: The Work of Etienne-Jules Marey (1830-1904)* (1994), pp. 18-20. Garrison-Morton 816. 40800

From a Pioneer American Paleontologist

29. **Cope, Edward Drinker** (1840-97). (1) Autograph letter signed to General Edward O. C. Ord (1818-83). Denver, July 25, 1879. 2pp. (2) Letter signed to Edward Ingersoll (1852-1946), with postscript in Cope's hand. Philadelphia, February 16, 1883. 2pp. Both letters tipped into Ingersoll's copy of Cope's *The Crocodilians, Lizards, and Snakes of North America* (Washington, D.C.: Government Printing Office, 1900), with bookplate of the Explorers Club Library stating that this copy had been donated by Ingersoll. Book is bound in cloth ca. 1900, leather spine label (worn, cracked), cover detached but present, minor toning and dampstaining. \$1500

From renowned naturalist Edward Drinker Cope, pioneer in the development of American vertebrate paleontology, originator of "Cope's Law" stating that



population lineages tend to increase in body size over evolutionary time, and author of an astonishing 1500-plus scientific books and papers. From 1871 to 1879 Cope traveled all over the American West with the Hayden and Wheeler geological surveys, where he explored previously undiscovered fossil fields, discovered and named dozens of new dinosaur species, and published an enormous number of scientific papers on his findings—76 in one year alone! Cope's prodigious output during this period brought him into conflict with fellow American paleontologist Othniel C. Marsh, resulting in the famous "Bone Wars," a 20-year-long controversy between the two men over priority of discovery, validity of achievements and access to publication.

Cope's 1879 letter was written to General Edward O. C. Ord, a hero of the American Civil War who at the time was serving as commander of the U. S. Army's

Department of Texas. Cope's letter introduced Ernest Ingersoll, a rising young naturalist and science writer:

Dear Sir:—

I presume on the various facilities you have at different times granted me, to introduce to your notice my friend Mr. Ernest Ingersoll who is both naturalist and literateur [sic]. He is now visiting Texas under the auspices of Harper Bros. N. York, and I suspect will find in San Antonio and its neighborhood various themes for his pen.

Any facilities you can throw in his way, will be useful both to science & the days literature, and a favor to me.

I remain with much regard yours Edw. D. Cope
(Philada., Pa)

P.S. The review of the zoology of Texas I was preparing when in San Antonio is in the printer's hands.

Ernest Ingersoll trained as a naturalist under the eminent zoologist Louis Agassiz and served as a zoologist with the Hayden geological survey expedition, authoring the expedition's *Report on the Natural History of the United States Geological and Geographical Survey of the Territories* (1874). It is more than likely that Ingersoll made the acquaintance of Edward Cope during the expedition. While on the Hayden survey, Ingersoll and his friend William Henry Jackson were the first trained scientists to see and describe the ancient Mesa Verde cliff dwellings. Ingersoll worked as a science writer for most of his life, contributing articles to numerous journals and publishing two important monographs on the shellfisheries of the United States and Canada, as well as several other works on natural history and geology. The 1879 letter of introduction to Gen. Ord that Cope wrote for Ingersoll must have remained in Ingersoll's hands, as he was able to paste it, together with the 1883 letter, into his copy of Cope's posthumous *Crocodilians, Lizards, and Snakes of North America*.

Cope's 1883 letter, written to Ingersoll himself, touches on Ingersoll's profession as a science writer:

Dear Sir

In reply to yours in which you ask me to examine your manuscript with a view to your proposition, I will send the *Naturalist* to you.

You will find the latest information upon the American species of rattlesnakes in Wheeler's sur-

vey – zoology. See also *Proceedings Academy Natural Science, Philada.* for Jan. 83.

Please accept my thanks for your article.

I remain yours very truly, Edw. D. Cope

P.S. Will you please kindly give your address.

"Naturalist" refers to the journal *American Naturalist*, the first scientific journal devoted exclusively to biology. Cope bought half the rights to the journal in 1877, and used it as a venue for his numerous scientific papers. "Wheeler's survey - zoology" refers to Volume 5 of *Report upon United States Geographical Surveys West of the One Hundredth Meridian in charge of First Lieut. Geo. M. Wheeler*; the Wheeler survey (1872-79) was the last of the four great surveys of the American West undertaken before the formation of the U. S. Geological Survey. *Dictionary of Scientific Biography*. MacKenzie, "Biographic Memoir of Ernest Ingersoll," *Marine Fisheries Review* 53 (1991): 23-29. 40655

Signed by Crick

30. **Crick, Francis H. C.** (1916-2004). The biochemistry of genetics. Offprint from *Proceedings of the Plenary Sessions, Sixth International Congress of Biochemistry* (1964). [20]pp. 281 x 217 mm. Original printed wrappers, *signed by Francis Crick* on the front wrapper. Fine copy. **Sold**

First Edition, Offprint Issue of Crick's review of current progress in molecular biology and the biochemistry of genetics. Crick received a share of the Nobel Prize in physiology or medicine in 1962 for his role in discovering the double-helix structure of DNA (with James Watson and Maurice Wilkins). 40789

Rare Darwin Caricature

31. **Darwin, Charles** (1809-82). Prof. Darwin. Chromolithograph caricature of Darwin by Faustine Betbeder, from *Figaro's London Sketch Book of Celebrities* (18 Feb. 1874). Mounted on a leaf from the *Sketch Book* (trimmed) with wood-engraved frame and printed caption. 208 x 121 mm. Small lacuna in left margin of mount, margins of mount irregularly trimmed, minor creasing. \$400



One of the best-known and rarest caricatures of Darwin, showing him as an ape inviting another ape to contemplate himself in a mirror. Darwin was often caricatured as an ape after the publication of *Descent of Man* (1871), the first of his works to discuss human evolution; it was in this work that he stated that the extinct ancestors of *Homo sapiens* would have to be classed among the primates. Caricatures like this one both reflected and perpetuated the popular misconception that Darwin had posited man's direct descent from apes as we know them today. See Browne, "Darwin in caricature: A study in the popularization and dissemination of evolutionary theory," in Larson, *The Art of Evolution: Darwin, Darwinisms and Visual Culture* (2009), p. 26. 40855

Inscribed by the Author

32. **Delondre, Auguste & Bouchardat, Apollinaire** (1806-86). *Quinologie: Des quinquinas*. . . . 4to. [4] 48pp. 23 hand-colored lithographed plates (each with tissue guard), double-page hand-colored engraved map. Paris: Germer Baillière, 1854. 340 x 257 mm. Marbled boards, cloth back-strip c. 1854, somewhat rubbed & faded, small splits in front hinge. Minor foxing, but very good. *Inscribed by Delondre* on the flyleaf: "à Monsieur Dublanc Membre de l'Académie Impériale de Médecine &c. &c. / Souvenir bien affectueux /



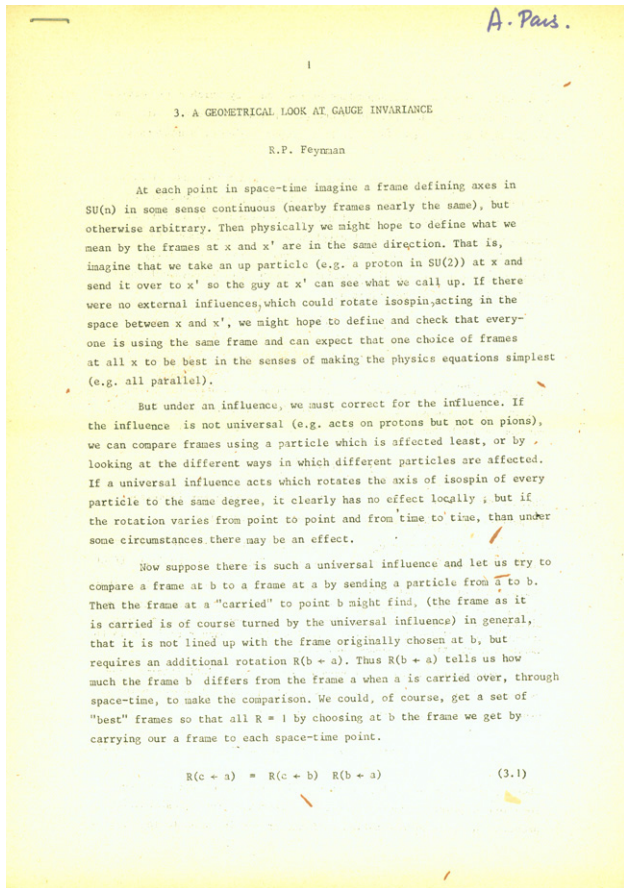
Graville-Havre 8 novb. 1856 / Auguste Delondre.”
\$1500

First Edition. “This work contains twenty-three good coloured plates, exhibiting all the barks then met with in commerce” (Flückiger & Hanbury, quoted in Waring, p. 355). Delondre, a pharmacist and quinine manufacturer, was interested in both the scientific and commercial aspects of quinine; his book illustrates and describes 33 different varieties of both true and false cinchona from the mountainous regions of South America, which at the time were the sole source of cinchona bark. Drug manufacturers continue to extract quinine from cinchona even today, as it is not commercially feasible to synthesize it in the laboratory. 34516

Three by Feynman

33. **Feynman, Richard** (1918-88). (1) The present situation in fundamental theoretical physics. Offprint from *Anais da Academia Brasileira de Ciências* 26 (1954). [2], 51-59pp. 270 x 185 mm. Original printed wrappers, one corner a little creased. (2) Photocopy of typed letter signed to V. K. Weisskopf. Pasadena, Jan. 4 – Feb. 11, 1961. 15pp. Stapled. 281 x 217 mm. (3) Gauge theories. Photocopied and mimeographed typescript. N.p., 1976. 298 x 212 mm. Together 3 items, from the library of **Abraham Pais** (1918-2000), physicist and historian of physics, with his signature and initials in several places. Very good. \$750

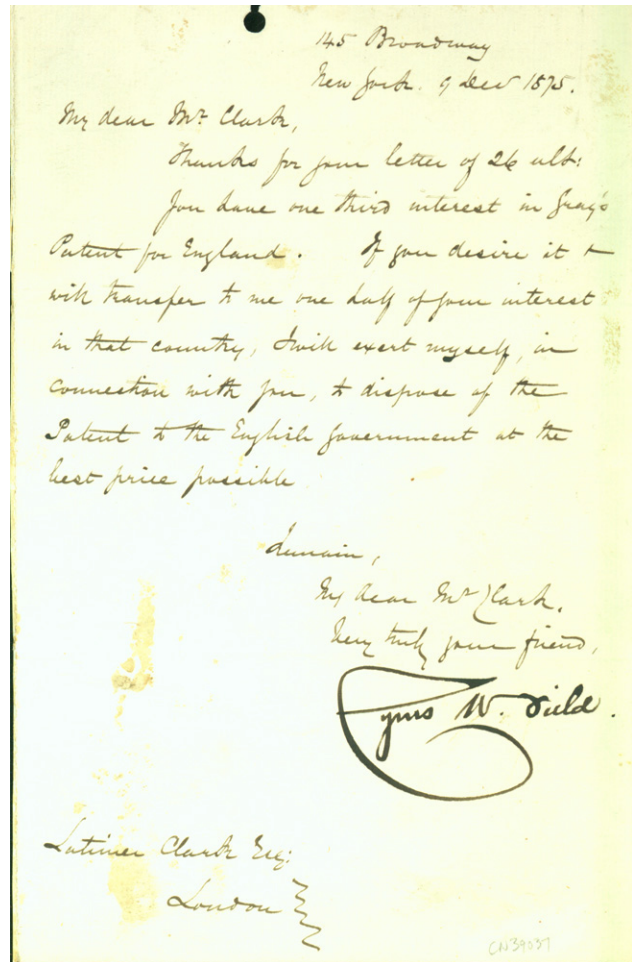
First Edition of no. (1). Feynman received a share of the 1965 Nobel Prize in physics for his fundamental



work in quantum electrodynamics; he also worked on the Manhattan Project, and became known to a wide audience for his irreverent personality and his quirky and humorous books and lectures on popular science. The present collection includes a photocopied / mimeographed typescript of his 1976 paper on gauge studies, included in *Selected Papers of Richard Feynman* (2000). These items are from the library of Abraham Pais, author of *Subtle is the Lord*, *Inward Bound*, *Niels Bohr's Times* and other seminal works on the history of modern physics. 40865

From the Man behind the Atlantic Cable

34. **Field, Cyrus West** (1819-92). Letter signed to Latimer Clark. New York, December 9, 1875. 1 page. 202 x 128 mm. A few light stains, small hole punched in top margin not affecting text. Provenance: Latimer Clark. \$2750



Field, a wealthy American businessman, organized the construction and laying of the first working transatlantic submarine telegraph cables in 1858, 1865, and 1866. Field became obsessed with the idea of a transatlantic telegraph after an encounter in 1854 with F. N. Gisborne, the head of an unsuccessful attempt to lay an underwater cable between New York and Newfoundland. To capitalize his venture, Field organized two companies: the New York, Newfoundland and London Electric Telegraph Company, in which Samuel F. B. Morse received a one-tenth interest to act as "advising electrician"; and the Atlantic Telegraph Company of Great Britain, formed in partnership with Charles Tilston Bright, George Seward, and John Brett.

After obtaining support from the American and British governments, Field appointed Dr. Edward Orange Wildman Whitehouse, a self-taught amateur electrician, to supervise the monumental task of designing and manufacturing transatlantic telegraphy equipment and twenty-five hundred miles of insulated cable