

18th Century Material Culture: Engineering, Surveying, Drafting, & Cartography - Part I



Engineers
&
Surveyors



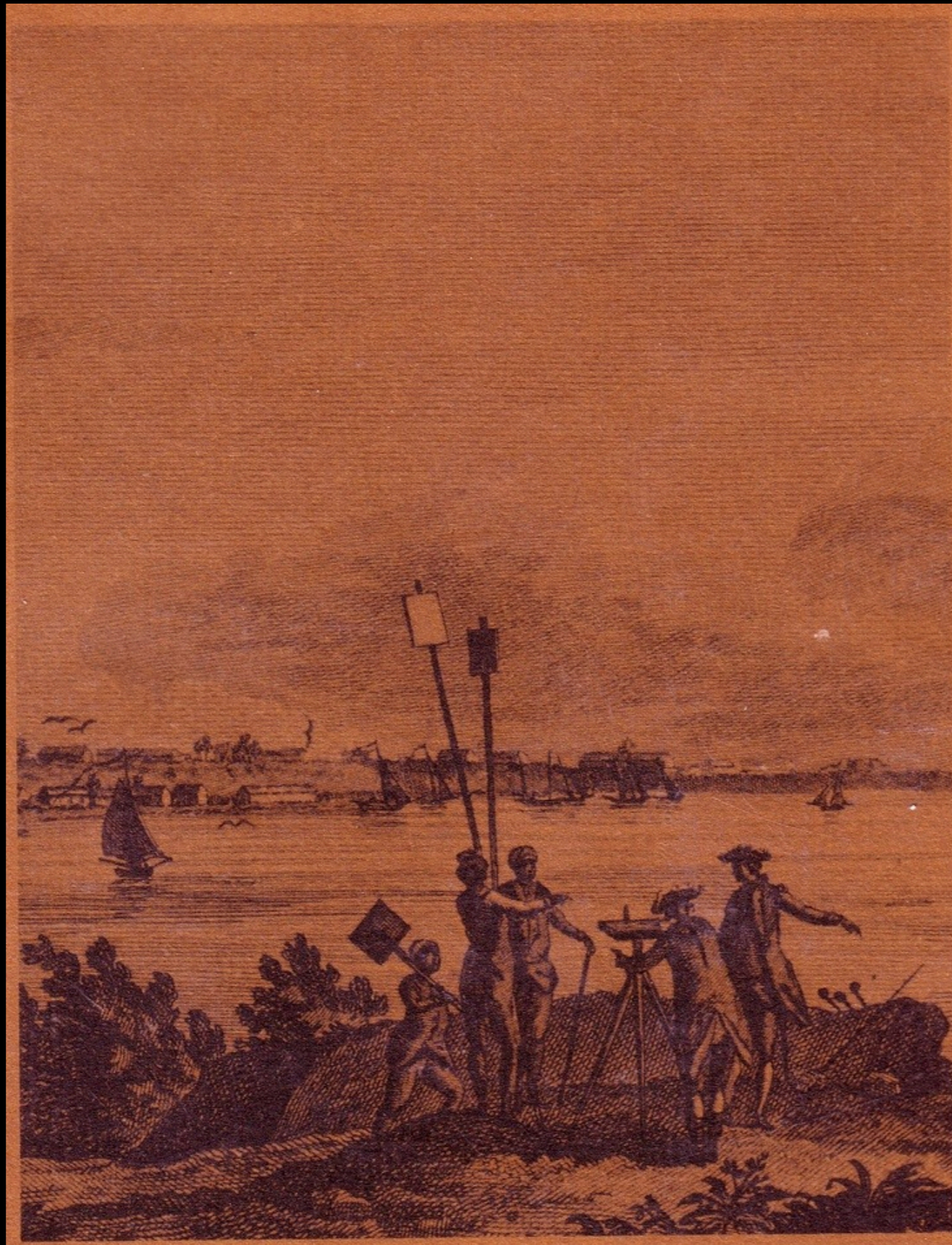
Highland Landscape
by Paul Sandby c. 1750
(Victoria & Albert)



James Brindley (1716 - 1804). British Engineer
by Francis Parsons 1770
(National Portrait Gallery)



Peter Dolland
by John Hoppner c. 1775 - 1779
(Yale Center for British Art)



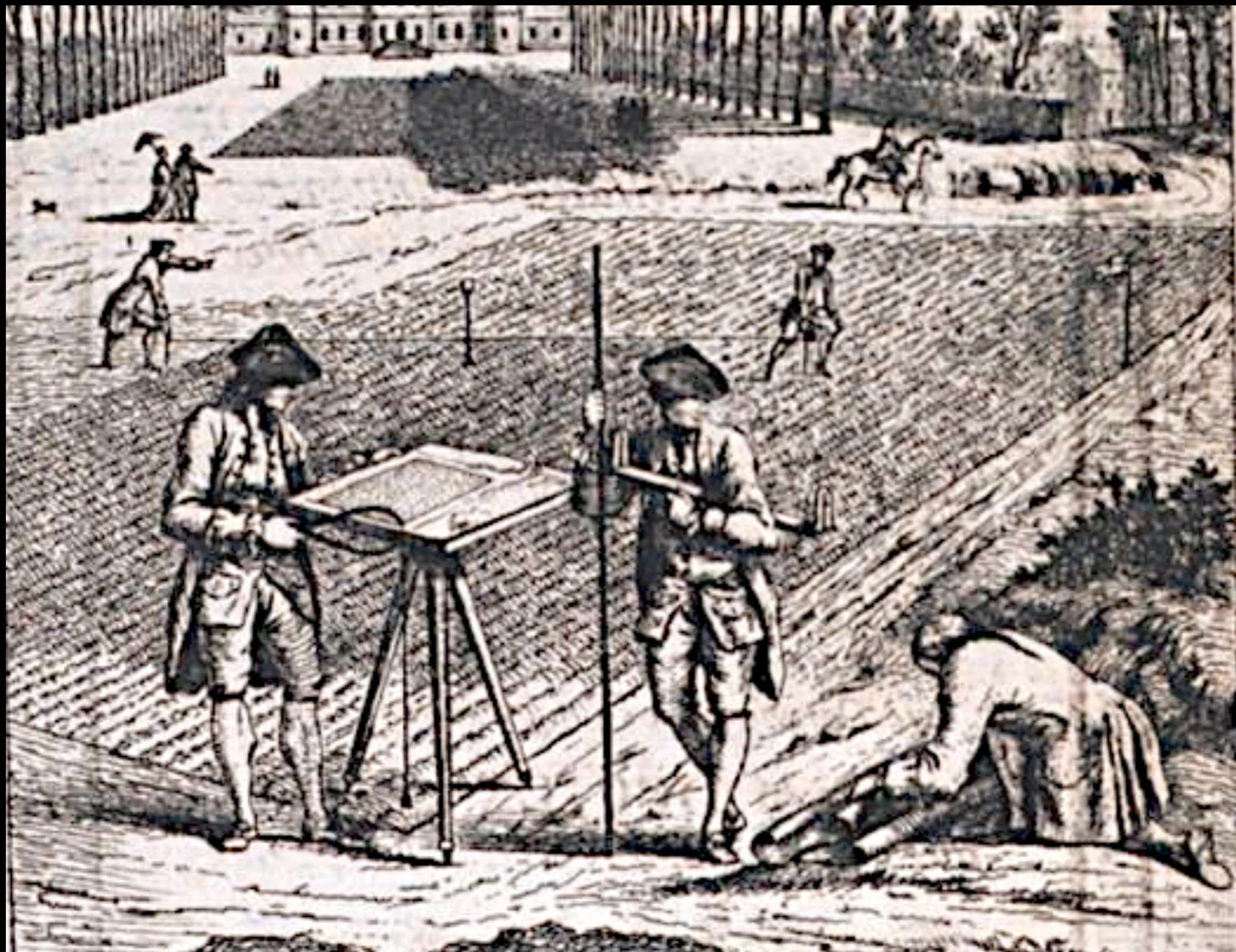
Frontispiece: The American Campaigns of Rochambeau's Army





La Science de l'arpenteur: dans toute son etendue
by Dupain de Montesson

1775





View Near Loch Rannoch
by Paul Sandby c. 1749
(The British Library)



View Near Loch Rannoch
by Paul Sandby c. 1749
(The British Library)

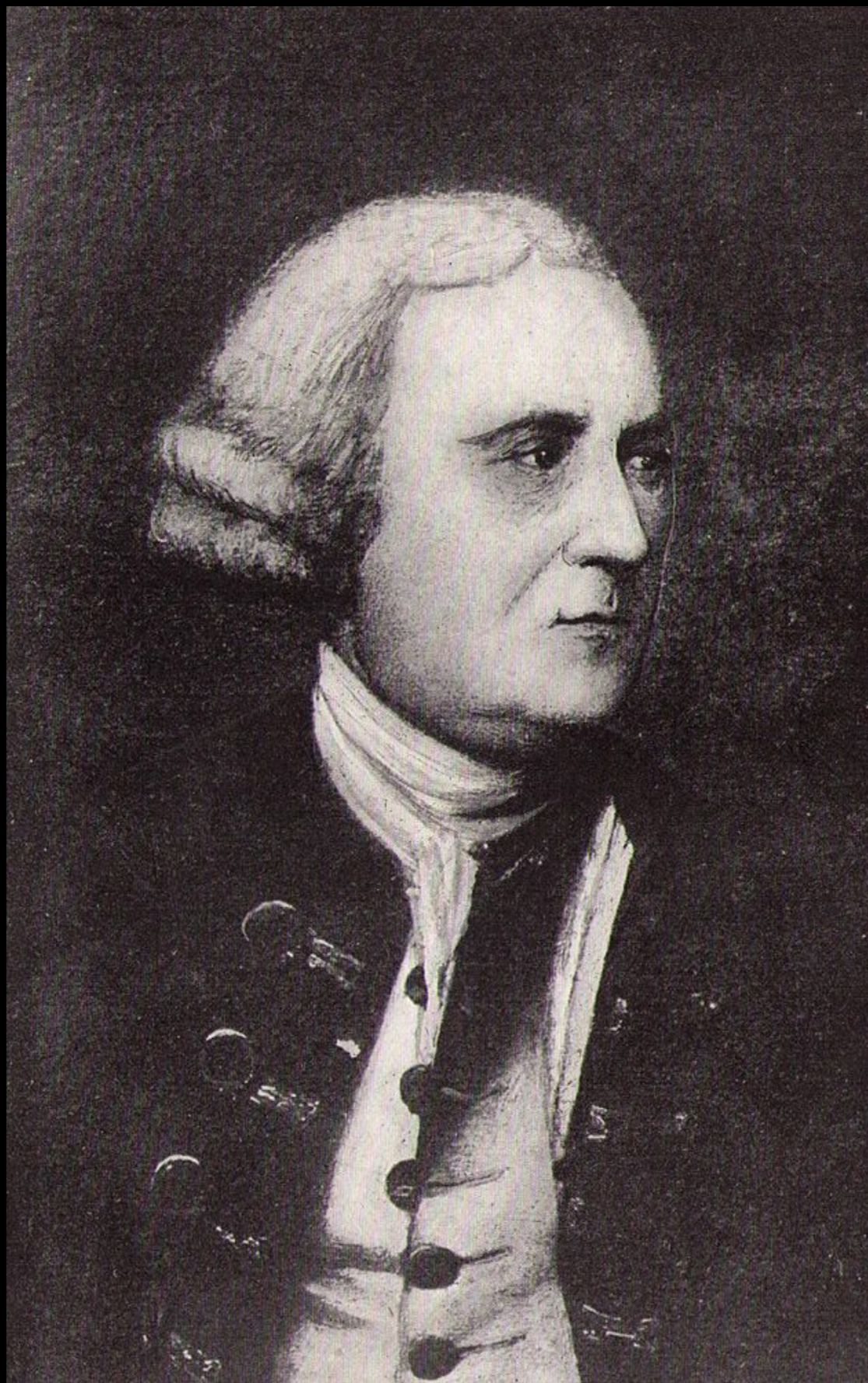


Humphry Repton Surveying with a Theodolite
c. Late 18th - Early 19th Century
(Stapleton Historical Society)

British Military Engineers



Young Man in Military Dress Sketching - Possibly a Military Engineer
by Paul Sandby
(National Galleries of Scotland)



Colonel James Gabriel Montresor (1704 - 1776), Corps. of British Engineers, H.M. 14th Regiment of Foot



Possibly John Montresor, British Engineers
by Unknown 1765
(Library and Archives Canada)



John Montresor, British Engineers
by John Singleton Copley 1771
(Detroit Institute of Arts)



New York



Boston 1775

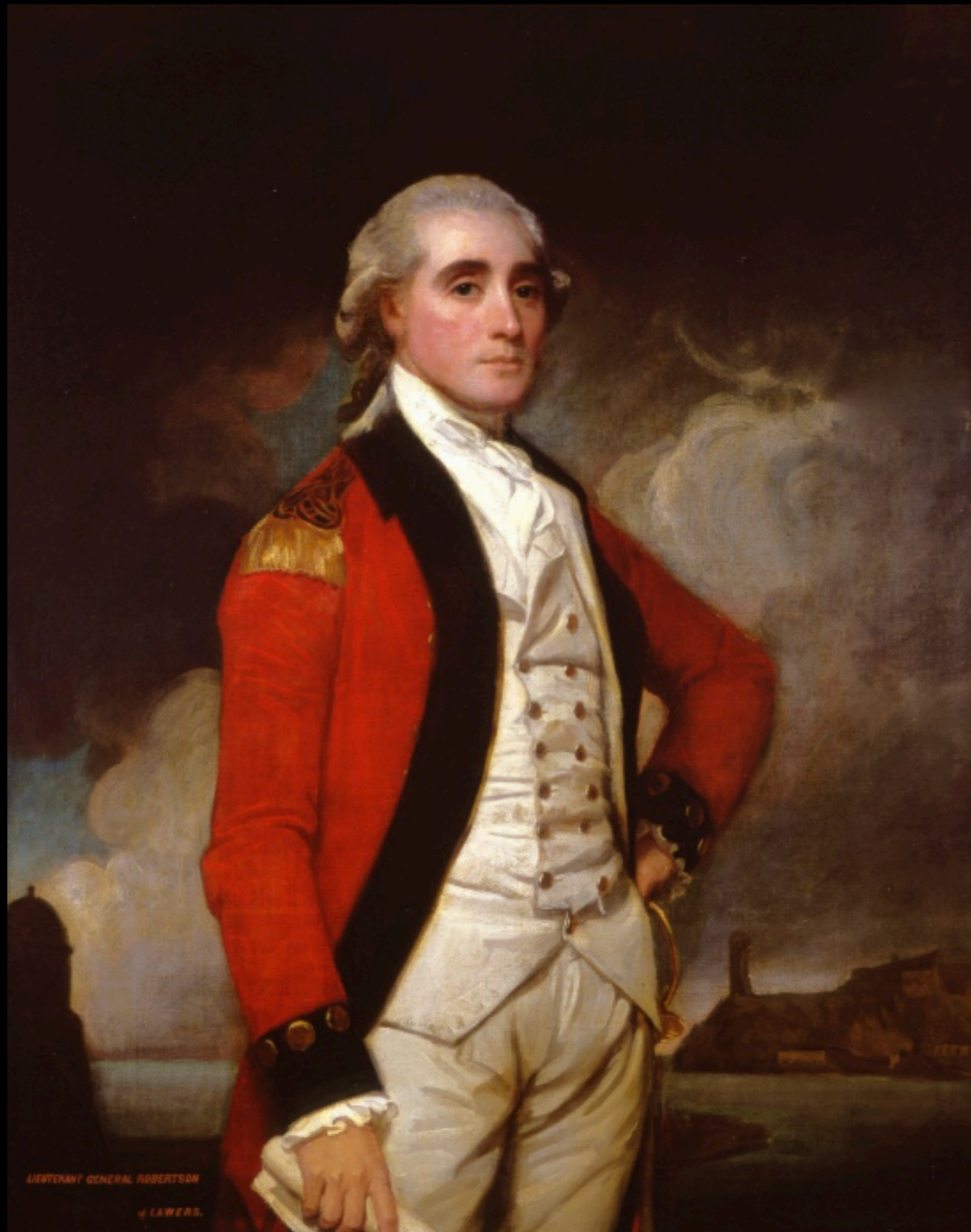
Maps ny John Montresor



Frances Tucker Montresor, Wife of John Montresor of the British Engineers
by John Singleton Copley 1778
(Private Collection)



Frances Tucker Montresor, Wife of John Montresor of the British Engineers
by John Singleton Copley 1778
(Harry S. Truman Building, Washington, D.C.)



Major Archibald Robertson of Lawers, British Engineers
by George Ramsay 1782
(Museum of Fine Arts, Petersburg, Florida)



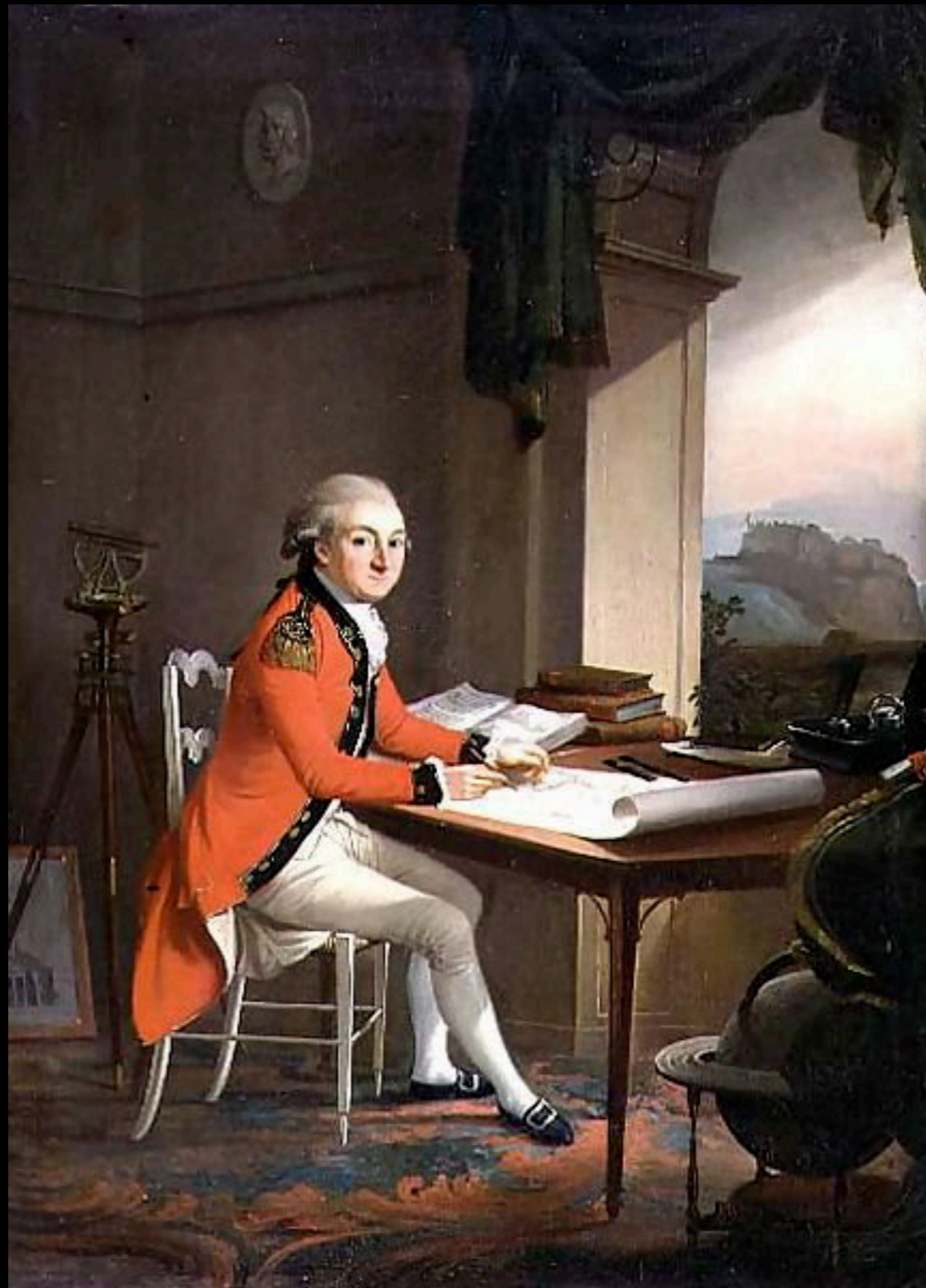
“View of part of the rebel works round Walton's House, with the situation of our Batterys on Long Island--
taken from N. York Island 8th Octr. 1776.”

by British Engineer Archibald Robertson 1776

(New York Public Library)



Practitioner-Engineer James Fiddes, Corps of Engineers
by English School c. 1776 - 1782
(Royal Engineers Museum)



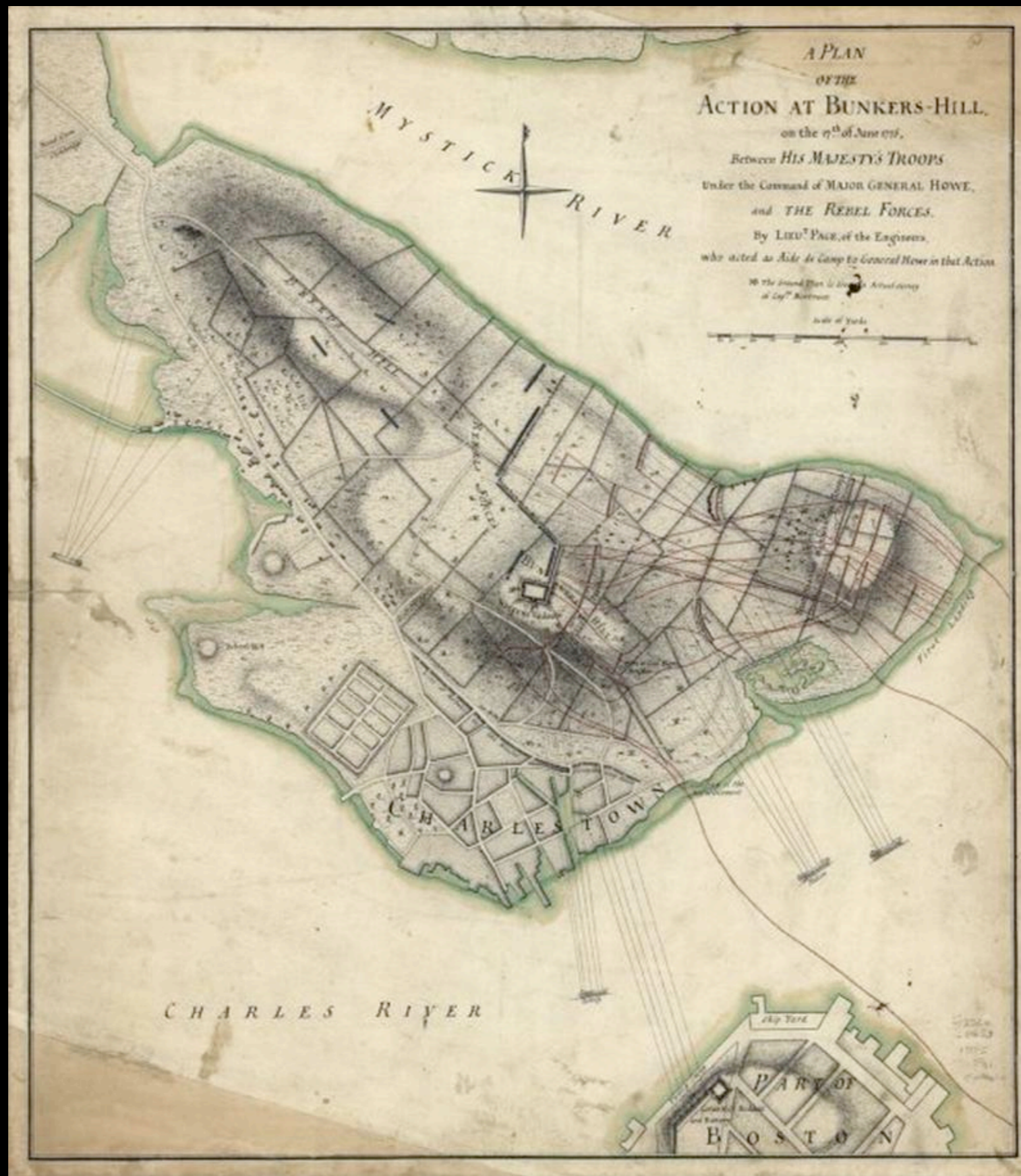
Captain Andrew Frazer, British Engineers
c. 1770



“A View of the Bason of Quebec taken from the Citadel showing Beauport Shore, Isle of Orleans & Point Levi”
by James Hunter c. 1770



Sub-Engineer and Lieutenant Thomas Hyde Page,
by James Northcote c. 1778-82
(Sir Thomas Crawley-Bovery, Flaxley Abbey)



Map by Sub-Engineer and Lieutenant Thomas Hyde Page,
by James Northcote c. 1778-82
(Sir Thomas Crawley-Bovery, Flaxley Abbey)

MILITARY ARCHITECTURE

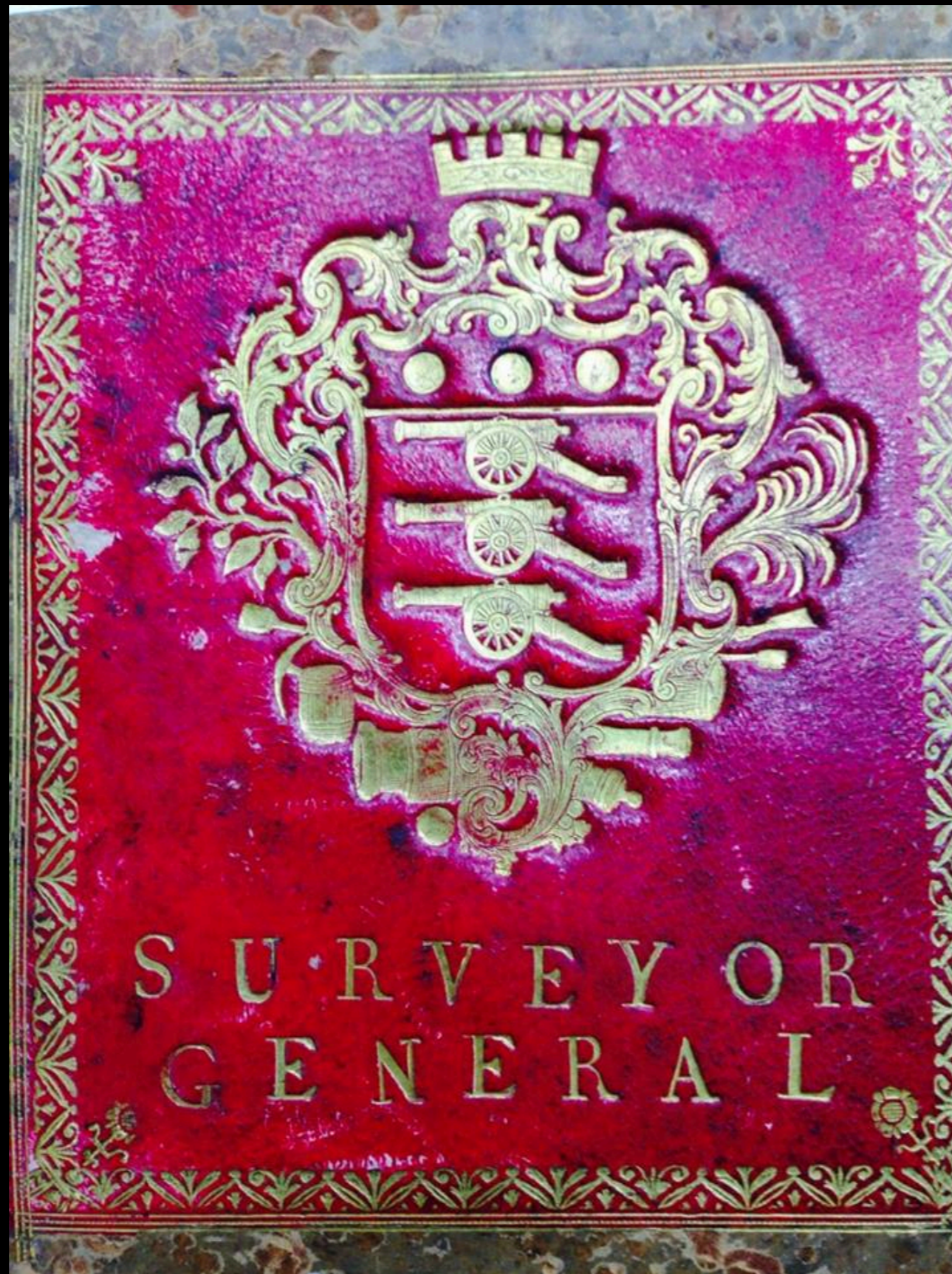


Military Architecture
describing all parts of a
FORTIFICATION
and all that relates to Sieges, Battles,
Marches of Arms & Instruments
as also to all sorts of Warlike
Instruments used in Attacking
or Defending Towns &c.

London,
Printed for Bachelier & Carter
N^o 10, St Pauls Church Yard,
and R. Wilkinson, N^o 28 Cornhill



"A Black Wood Cutter at Shelburne, Nova Scotia, 1788."
By Captain William Booth, Corps of Engineers.



Coat of Arms - Surveyor General of His Majesty's Board of Ordnance
Journals of Proceedings of the Board of Ordnance
(National Archives, Kew UK - Photograph Courtesy Marshall Sheetz)



Printed by Hullmandel & Walton

“SOLDIER ARTIFICER COMPANY”
by Hullmandel & Walton 1786

Austrian Military Engineers



Johann Peter Krenner
by the Circle of Martin van Meythens c. 1750 - 1760

Compasses



Compass
Mid 18th Century
(George C. Neuman Collection, Valley Forge National Historic Park)



London Compass
by "I. COGGS. FLEET STREET: LONDON. Fecit." c, 1740
(Scientific Instrument Society - Jeffrey Lock)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)



Hanging Miner's Compass
by "Johann Oberhayser Vo Schwaz 1765"
(Scientific Instrument Society - Jeffrey Lock)



Brass Cased Compasses
18th Century
(Estate of Tom Wnuck)



Wood Cased Compasses
18th Century
(Estate of Tom Wnuck)



Compass
by William Collier of London 1712

Sundial Compasses



Butterfield Paris Compass
c. Early 18th Century
(Southeby's)



Butterfield Paris Compass
by "Le Maire a Paris a la Pierre d'arman" c. 1740 - 1750
(Private Collection)

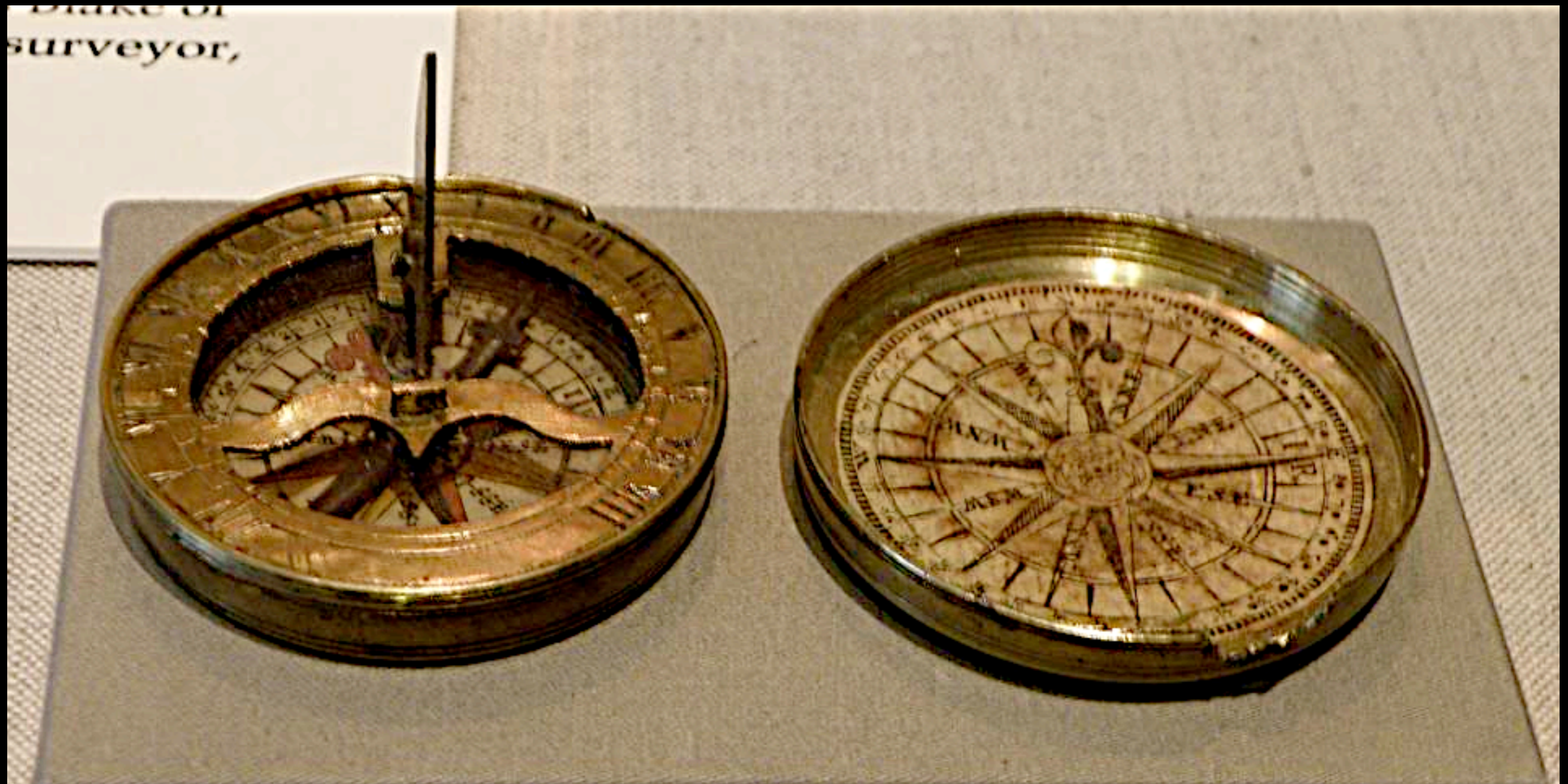


Butterfield Paris Compass
by "Le Maire a Paris a la Pierre d'arman" c. 1740 - 1750
(Private Collection)



Butterfield Paris Compass
c. 1750
(Leons Militaria)

Blake of
surveyor,

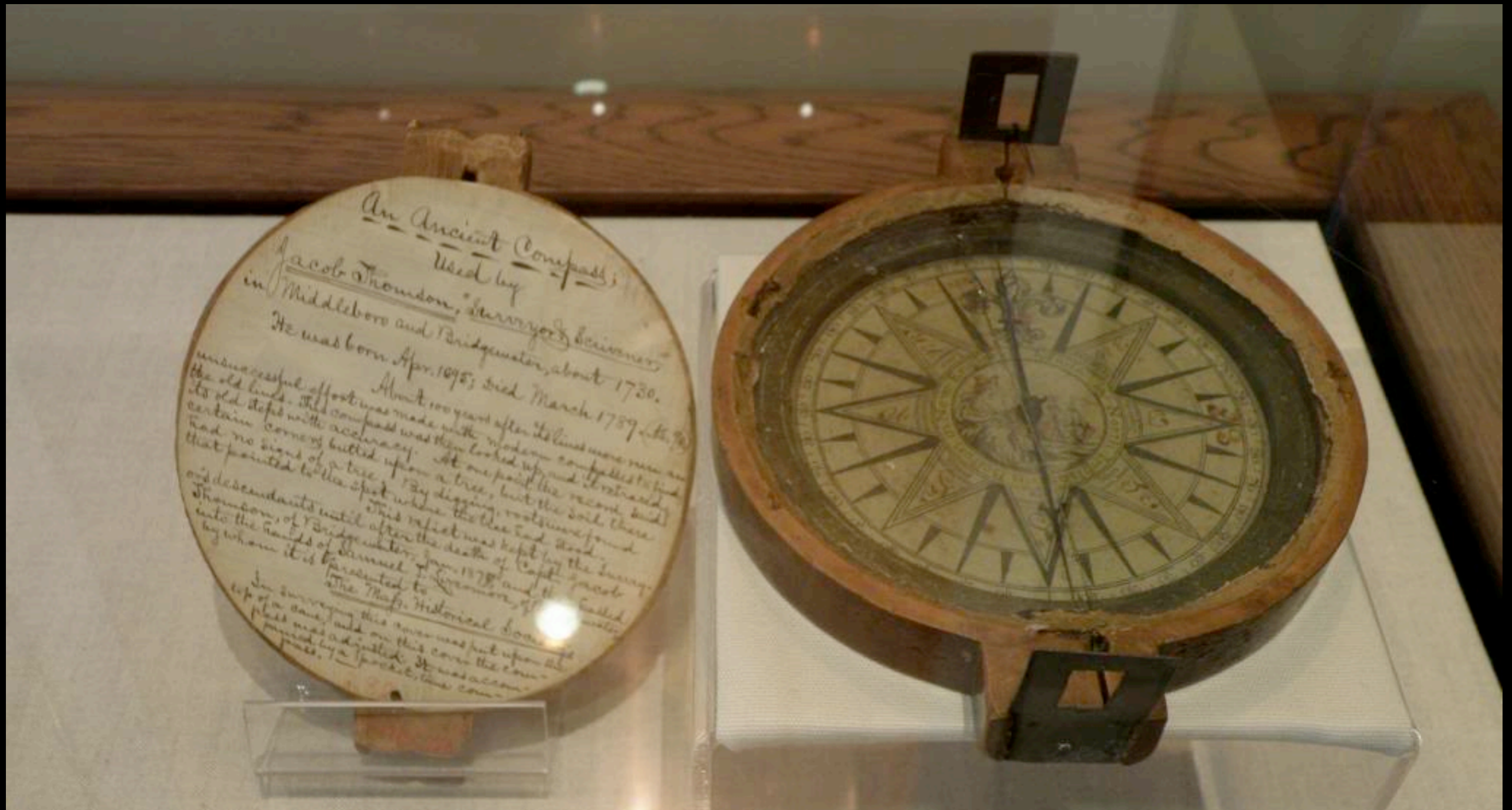


Compass / Sundial
by James Blake of Dorchester, Massachusetts 18th Century
(Massachusetts Historical Society)

Surveying Compasses



Trade Card
18th Century



An Ancient Compass
 Used by
Jacob Thomson, Surveyor & Seaman
 in Middleboro and Bridgewater, about 1730.
 He was born Apr. 1695; died March 1757. (1759)

About 100 years after its first use, an unsuccessful effort was made with modern compasses to find the old land. The compass was then looked up, and it retraced its old steps with accuracy. At one point the second hand had no sign of a tree. By digging, roots were found that pointed to the spot where the tree had stood.

This relic was kept by the Surveyor Thomson, of Bridgewater, from 1878, and the first into the hands of Samuel J. Governor, of The Mass. Historical Society.

In surveying this cover was put upon the top of a case, and on this cover the compass was adjusted. It was accompanied by a pocket, the compass.

A "Circumferentor" (Surveyor's Compass)
 Made in Boston, Massachusetts c. 1725
 (Massachusetts Historical Society)



Surveyor's Compass
by Stephen Greenleaf of Boston, Massachusetts c. 1750
(New Hampshire Historical Society)



English Brass Surveyor's Compass (Restored)

c. 1735

(Department of the Geographer to the Army 1777 - 1783)



Surveyor's Compass
by Joseph Halsey of Boston, Massachusetts c. 1750 - 1760
(New Hampshire Historical Society)



Surveyor's Compass
by Thomas Greenough of Boston, Massachusetts c. 1760



Surveyor's Compass & Chain
by Joseph Halsey of Boston, Massachusetts c. 1750 - 1760
(New Hampshire Historical Society)



Surveyor's Compass
by Joseph Halsey of Boston, Massachusetts c. 1750 - 1760
(New Hampshire Historical Society)



Surveyor's Compass
by Joseph Halsey of Boston, Massachusetts c. 1750 - 1760
(New Hampshire Historical Society)



Surveyor's Compass
by Joseph Halsey of Boston, Massachusetts c. 1750 - 1760
(New Hampshire Historical Society)



Surveyor's Compass
by John Dupee of Boston, Massachusetts c. 1750



Detail: Surveyor's Compass
by John Dupee of Boston, Massachusetts c. 1756



Surveyor's Compass
by William Hart of Portsmouth, New Hampshire c. 1770
(New Hampshire Historical Society)



Surveyor's Compass
by Lewis Michael of Pennsylvania c. 1788



Surveyor's Compass
by Lewis Michael of Pennsylvania



Surveyor's Compass
by Lewis Michael of Pennsylvania



Surveyor's Compass
by Lewis Michael of Pennsylvania



Brass Surveyor's Compass
by David Rittenhouse of Philadelphia c. 1770



Surveyor's Compass
by George Adams of London



Detail, Wooden Surveyor's Compass
by George Adams, London



Surveyor's Compass
by Fowler c. 1770



Surveyor's Compass by
S. Browning



Surveyor's Compass Owned by George Washington



Surveyor's Compass
by George Adams of London, Mid 18th Century



Surveyor's Compass
by Benjamin Rittenhouse



Surveyor's Compass Owned by George Washington
by David Rittenhouse 1782
(Mount Vernon)



Surveyor's Compass
by Camm Moore (1755 - 1845) of North Carolina
(Leland Little Auction & Estate Sales)



Copper Printing Plate for the Compass Labels of William Hart of Portsmouth, New Hampshire
c. 1755 - 1800
(New Hampshire Historical Society)



Applewood Surveyor's Compass
18th Century
(Bonhams - William H. Guthman Collection)



Applewood Surveyor's Compass
"Made and Sold by by Joseph Halsy in Fish Street BOSTON"
"Richard Baxter His Compass / bought ye 2d anno 1747"
(Bonhams - William H. Guthman Collection)



Cherry Surveyor's Compass
by "Hagar / Maker / near the Draw Bridge / Boston 1754"
(Bonhams - William H. Guthman Collection)



Cased Cherry Surveyor's Compass
by Thomas Greenough (1710 - 1785) of Boston, Massachusetts
(Bonhams - William H. Guthman Collection)



Cherry Surveyor's Compass
"MADE BY CLARK ELLIOTT IN NE LONDON"
c. 1767 - 1771
(Bonhams - William H. Guthman Collection)



Walnut Surveyor's Compass
Marked "Newell / Maker / East E *** / FANUEIL HALL / BOSTON"
Andrew Newell (1749 - 1798)
(Bonhams - William H. Guthman Collection)



Cherry Surveyor's Compass
Late 18th Century
(Bonhams - William H. Guthman Collection)



Cherry Surveyor's Compass
by T.S. Bowles of Portsmouth, New Hampshire
Signed in Script "Callender Sep."
Late 18th Century (c. 1785 - 1795)
(Bonhams - William H. Guthman Collection)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)



Surveyor's Compass in a Quadrant
Late 18th - Early 19th Century
(Bonhams - William H. Guthman Collection)

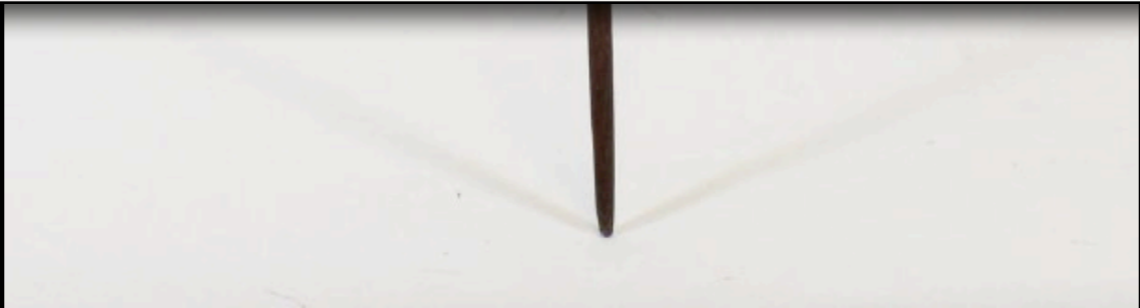
Surveying Compass Tripods



Surveyor's Compass on a Tripod
Late 18th Century
(Bonhams - William H. Guthman Collection)



Wooden Tripod for Surveyor's Compass
Used by Samuel Lane of Stratham, New Hampshire c. 1739
(New Hampshire Historical Society)



Wooden Tripod for Surveyor's Compass
Used by Samuel Lane of Stratham, New Hampshire c. 1739
(New Hampshire Historical Society)



Wooden Tripod for Surveyor's Compass
Used by Samuel Lane of Stratham, New Hampshire c. 1739
(New Hampshire Historical Society)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)

Surveyor / Gunter Chains



Surveyor / Gunter Chain Used by Samuel Lane of Stratham, New Hampshire

c. 1750

(New Hampshire Historical Society)



Brass Survey Chain Tally
Recovered from the Wreck of BlackBeard's Queen Anne's Revenge



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)

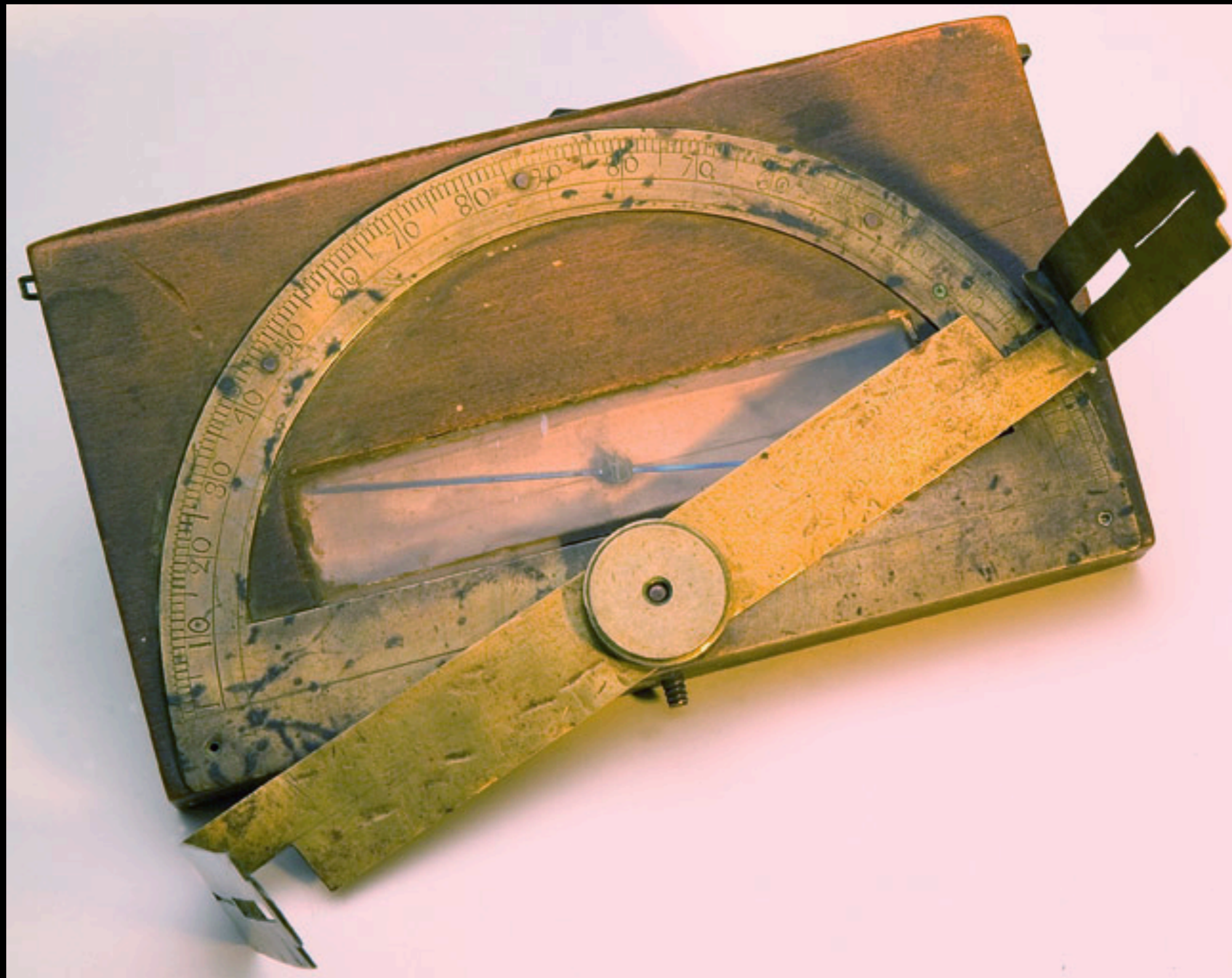
Semi Circumferentors



Surveyor's Semi - Circumferentor
"Henry Oliver/ 1775"
(Bonhams - William H. Guthman Collection)



Surveyor's Semi - Circumferentor
18th - Early 19th Century
(Antique Associates of West Townshend, Inc.)



American Surveyor's Walnut Semi - Circumferentor
1790
(Fleaglass)

Waywisers Perambulators



Map of Middlesex
by John Rocque 1757
(Universitat Bern)

1 Minute of Time West from the Meridian of St. Pauls 40

20 Seconds of Time West from the Merid

OF

H A R

A Map of
the COUNTY of
M I D D L E S E X
R e d u c e d
from an Actual Survey in four Sheets
By John Rocque.

Carte de la
P R O V I N C E
de M I D D L E S E X reduite
D'apres un arpentage en quatre feuilles
Par Jean Rocque
1757.



Map of Middlesex
by John Rocque 1757
(Universitat Bern)



English Waywiser or Perambulator
c. 1758
(Arader Galleries, New York)



Waywiser or Perambulator
by George Adams, Jr. (1750 - 1795) with Lock Patented by Joseph Bramah in 1784
(Scientific Instrument Society)

Telescopes



Thomas Newenham
by Edward Haytley 1749
(Yale Center for British Art)



Naval Telescope
by Nairne & Bluntc. 1775
(National Maritime Museum)



Brass Telescope



Surveyor's Telescope, Compass, Etc.
18th Century
(Private Collection)

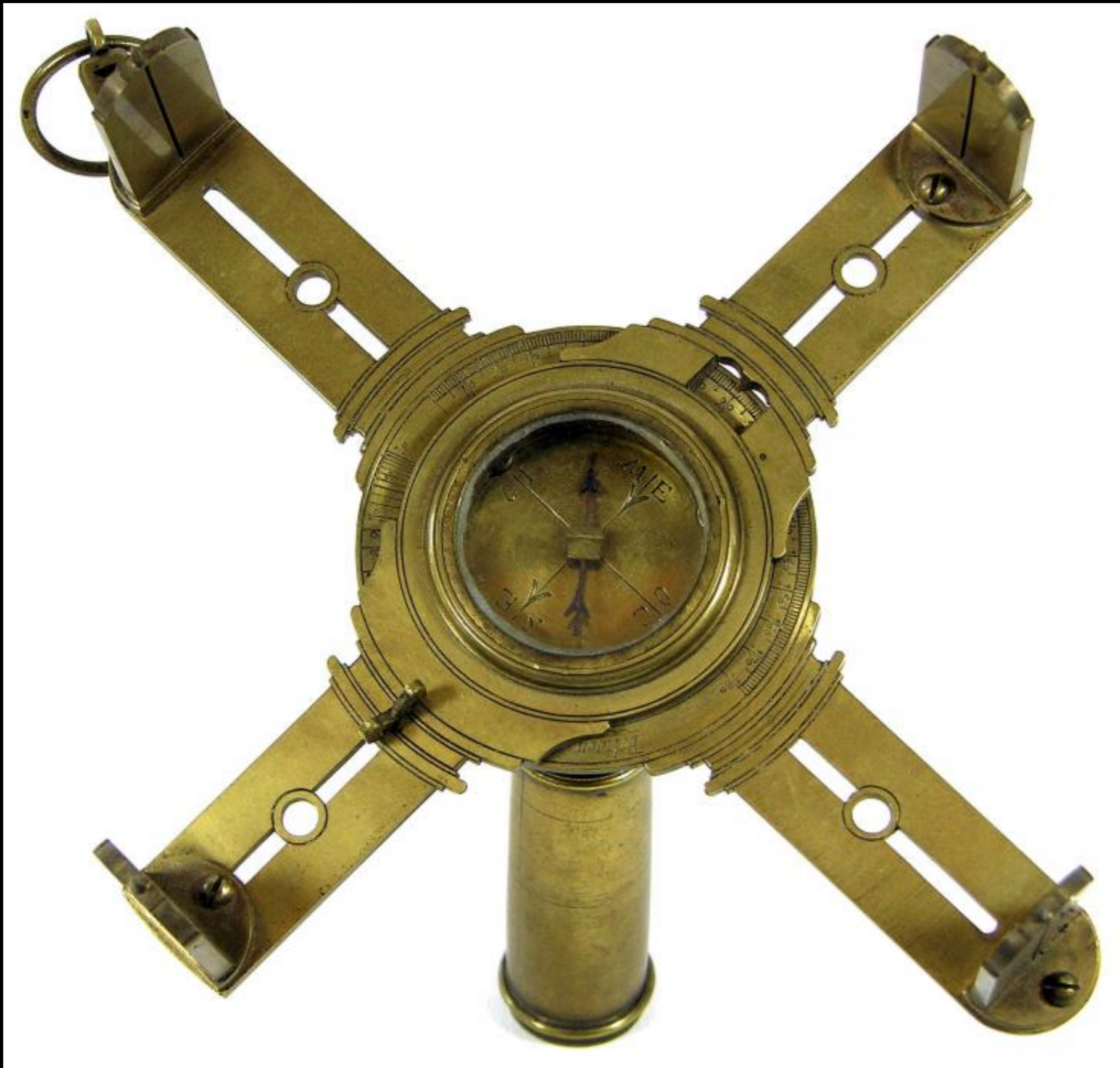


Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)

Surveyor's Cross / Graphometer



Surveyor's Cross or Graphometer
Late 17th Century - 18th Century
(Nicolàs de Hilster)



Surveyor's Cross or Graphometer
Late 17th Century - 18th Century
(Nicolàs de Hilster)



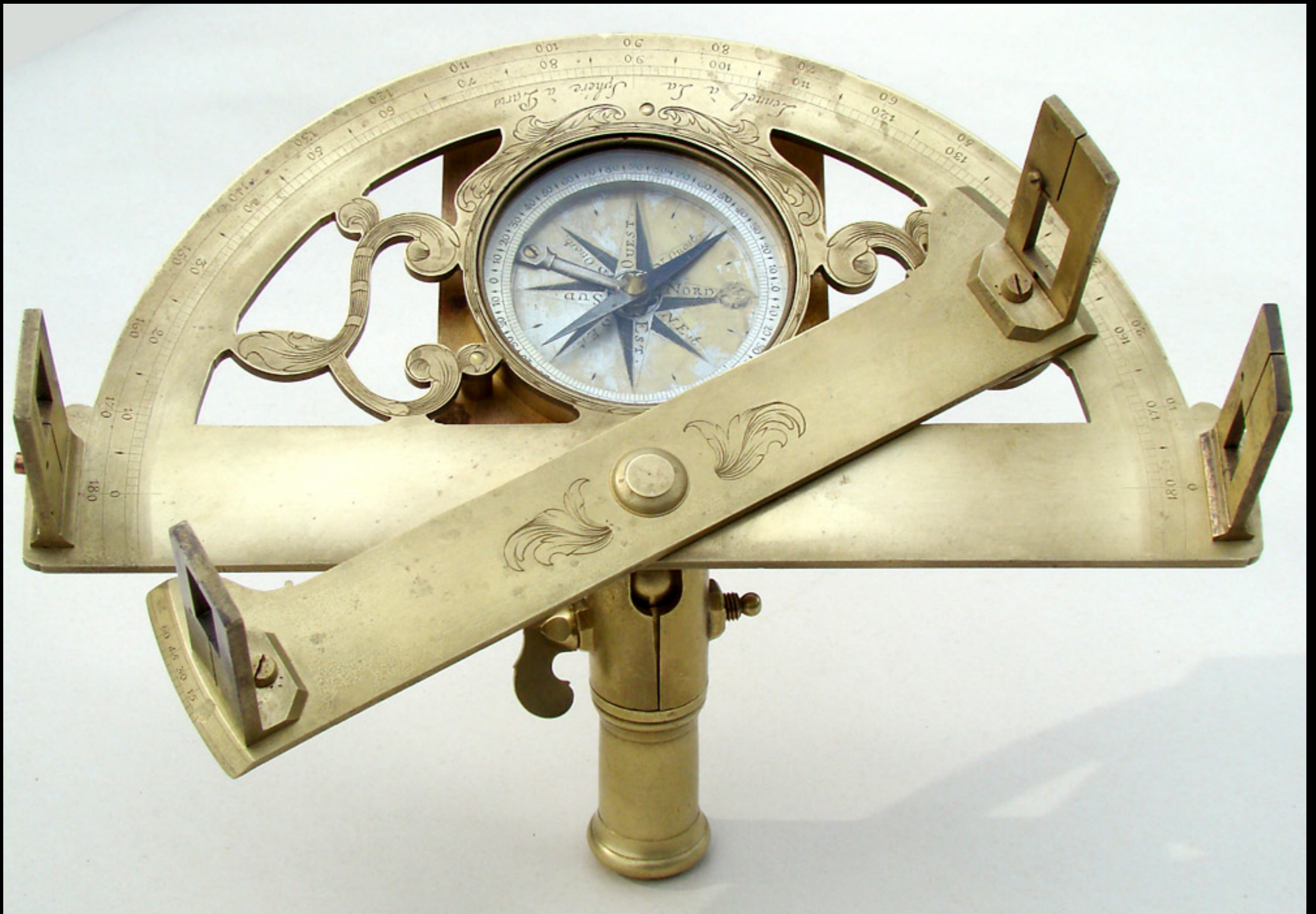
Surveyor's Cross or Graphometer
Late 17th Century - 18th Century
(Nicolàs de Hilster)



Surveyor's Cross or Graphometer
Late 17th Century - 18th Century
(Nicolàs de Hilster)



Surveyor's Cross or Graphometer
Late 17th Century - 18th Century
(Nicolàs de Hilster)



French Surveyor's Cross or Graphometer
Signed "Lennel à La Sphere a Paris." 1780
(Nicolàs de Hilster)

Quadrants & Octants



Naval Octant
by Martin, Joshua Lover; Jesse Ramsden c. 1774
(National Maritime Museum)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)



Mariner Hadley Reflecting Quadrant
"Gregory, London" Mid 18th Century
(West End Company)



Recreated Continental Engineers
(Department of the Geographer to the Army 1777 - 1783)



Davis Quadrant "Back Staff"
1st Half 18th Century
(West Sea Company)



Davis Quadrant "Back Staff"
1st Half 18th Century
(West Sea Company)

Acknowledgements

The 18th Century Material Resource Center greatly acknowledges our friends in the Recreated Department of the Geographer (1777 - 1783) for their many contributions to this edition. For more information on 18th Century Engineering, Drafting and Surveying, please contact these extremely knowledgeable historians at: www.armygeographer.org



Acknowledgements

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