GENERAL LIBRARY
OF
UNIVERSITY OF MICHIGAN

PRESENTED BY
Prof. W.W. Beman
April 1899

Thomas Hadden
THE

CYCLOPAEDIA;

or,

Universal Dictionary

of

ARTS, SCIENCES, AND LITERATURE.

PLATES. VOL. II.

BASSO RELIEVO — HOROLOGY.
THE

CYCLOPAEDIA;

or,

UNIVERSAL DICTIONARY

of

Arts, Sciences, and Literature.

by


with the assistance of

EMINENT PROFESSIONAL GENTLEMEN.

---

ILLUSTRATED WITH NUMEROUS ENGRAVINGS,

by the most distinguished artists.

---

PLATES. VOL. II.

BASSO RELIEVO—HOROLEGY.

---

LONDON:

Printed for LONGMAN, HURST, REES, ORME, & BROWN, PATERNOSTER-ROW,

F.C. AND J. RIVINGTON, A. STRAHAN, PAYNE AND BOSS, SCATCHerd AND LETTERMAN, J. CUTHEll,

CLARKE AND SONS, LACKINGTON HUGHES HARDING MAYOR AND JONES, J. AND A. ARCH,

CAdELL AND DAVIES, S. BAGSTER, J. MAVmAN, BLAcK KINGSBury PARBuRY AND ALLEN,

B. SCHOLLEY, J. BOOTH, J. BOOKER, SuttARY EVANCE AND FOX, BALDWIN CRADOCk AND JOY,

SHERWOOD NEELY AND JONES, OGLE DUNCAN AND CO., R. SAUNDERS, HURST ROBINSON AND CO.,

J. DICKINSON, J. PATerson, R. WHITESIDE, WILSON AND SONS, AND BRODIE AND DOWDING.

1820.
BASSO RELIEVO.

Hercules and Apollo contending for the Tripod, from the Villa Albani.

PLATE II.

Minerva subduing Hercules - British Museum.

BASSO RELEIVO.

THE TOMB STONE OF XANTHIppUS FATHER OF PERICLES.

Brought from Athens by Dr. Arkow
In the Possession of Charles Townley, Esq.

Drawn by J. Flaxman R.A.

Published as the Act directs, June 6, 1804, by Longman & Ree, Paternoster Row.
Fig. 1. — Basso-relievo round a Capital in the Cathedral of Carra.
Bleaching.

Washing & Clearing.

Published as the Act directs. Rob't. 1818, by Longman & Rees, Paternoster Row.

Engraved by Wilson Lowry.
BLOCK MACHINERY AT PORTSMOUTH.

PLATE IV.

Boring Machine

Cornering Saw

Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.

Published as the act directs, 1755, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.
PLAN OF A ROMAN CONSULAR CAMP ACCORDING TO POLYBIUS.

EXPLANATION AND REFERENCES.
1. The Praetorium or general's ground set apart for the Consul containing 40000 Roman square feet.
2. Ground behind the tents of the Tribunes for their Horses. Boats of Burthen, Baggage &c.
3. Ground where the tents of the Tribunes were pitched.
4. Ground behind the tents of the Prefects of the Allies for their Horses. Boats of Burthen, Baggage &c.
5. Ground where the tents of the Prefects of the Allies were pitched.
6. A cross street 100 feet wide called Principia, from which the encampments of the cavalry and infantry both of the Roman legions and of their Allies had their beginnings or commencements.
7. A street 60 feet wide between the Roman Horse.
8. The Horse of two Roman legions in ten troops each.
9. The Triarii of two legions in ten Maniples each.
10. Two streets 50 feet wide each between the Triarii and Principes of two legions.
11. The Principes of two legions in ten Maniples each.
12. The Hastati of two legions in ten Maniples each.
13. Two streets 50 feet wide each between the Hastati of the two Roman legions and the Horse of the Allies.
14. The Horse of the Allies wanting the Extraordinarii.
15. The Infantry of the Allies wanting the Extraordinarii, who amounted to a fifth part of their whole number in ten divisions each on the right and left sides of the Encampment.
16. Via Quadrata 50 feet wide running across the camp between the fifth and sixth Maniples and troops reckoned from the Principia.
19. Quarters or encamping ground for the Horse guards of the Consul and Quarter.
20. Quarters for the Foot guards of the Consul and Quarter.
21. A cross street 100 feet wide.
22. The extraordinary Horse except those selected for the guards of the Consul and Quarter.
23. A street 50 feet wide.
24. The extraordinary Foot except those selected for the guards of the Consul and Quarter.
25. Quarters for any strangers that might arrive at the Camp.
26. A space two hundred feet broad between the rearmost tents and the Rampart.
27. The Rampart. 28. The Ditch.
29. Porta principalis dextra.
30. Porta principalis sinistra.
31. Porta Decumanus according to some but Porta Bruttia according to others.
32. Porta Portaia according to some, but Porta Decumanus according to others.
33. A. B. B. Two right lines on which are marked the principal dimensions of the different parts of the camp showing the whole to be a square or an equilateral right angled quadrangle.
34. A Dextror. Bracul and Epaulement with a ditch before it opposite to each of the Gates.

A Scale of 1000 Feet.

Published as the Act directs. April 1st 1905 by Longman, Hurst, Rees & Orme Paternoster Row.
PLAN OF THE ENCAMPMENT OF A PARK OF ARTILLERY.
with a Regiment of 12 Companies, each consisting of 60 Privates.
The Park contains 80 Cannon, 20 Howitzers, 20 Pontoons, 4 Forges, 436 Wagons, 2600 Horses and 650 Drivers.

EXPLANATION.
A. B. C. D. Bounds of the Park.
E. Artillery Ground.
F. Subalterns Tents.
G. Captain's Tents.
H. Lieutenant Colonel.
I. and Major's Tents.
J. Colonel's Tent.
K. Staff Officers Tents.
L. Grand Sutlers Tents.
M. Petit Sutlers Tents.
N. Serjeants Tents.
O. Bells of Arms.
P. Alarm or Evening Guns.
Q. Army Guard.
R. Artillery Guard.
S. Rear Guard.
T. The Forges.
U. The Streets.
W. The Batmen's Tents, and
Horses of the Regiment.

Published as the Act directs, 1816, by Longman, Hurst, Rees & Orme, Dentonster Row.
Engraved by Wilson Lowry.
CASTRAMETATION.

Published as the Act directs, 1805, by Longman, Hurst, Rees and Orme. Paternoster Row.

Engraved by Wilson Lowry.
CANALS.

PLATE II.

Aqueduct BRIDGE at Kelvin on the Forth & Clyde Canal.

Plan.

Fig. 19.

Transverse Section.

Fig. 20.

Elevation.

Fig. 21.
CAST IRON AQUEDUCTS.

Mr. Telford's, on the Shrewsbury Canal at Long.

Fig. 22.

Fig. 23. by Mr. Fulton.

Fig. 24.
CANALS.
BRIDGES.

View—Fig. 42.

Section—Fig. 41.

Plan—Fig. 40.

Published as the Act directs, 1809, by Longman, Hurst, Rees & Orme, Paternoster Row.
Canteens.

Fig. 11. Screw Hoop

Fig. 12. Truss Hoop

Fig. 13.

Fig. 14. Turning the chime.

Fig. 15. Turning the head.

Fig. 16. Shears

Fig. 17.

Fig. 18. Punching the hoops.

Fig. 19. Rounding the ends of the hoops.

Published as the Act directs, by Longman, Hurst, Rees & Orme, Paternoster Row.

Engraved by Wilson Lowry.
CHEMISTRY.

IRON SMELTING FURNACE
CHEMISTRY.

BLAST FURNACE.

Fig. 1.

Fig. 3.

Published as the Act directs, July 1st 1810, by Longman & Rees, Paternoster Row.

Engraved by Wilson Lewis.
AIR VAULT.
1. Cirrus in different forms. 2. Cirro-stratus, subsiding on Cumuli beneath. 3. Cirrus as seen before Thunder. 4. Cirro-cumulus as seen before Thunder.

5. A Nimbus, flanked by Cirro-stratus and giving an Electrical discharge. 6. A range of Cumuli, passing to Cumulo-stratus before Thunder.

Published at the Ten shillings. June, 1815, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.
CONICS.

Published at the Act direct, Dec. 1807, by Longman, Hurst, Rees & Orme, Paternoster Row.

Engraved by Wilson Lowry.
CONICS.

ELLIPSE.

PLATE VIII AND II.

Published by Longman, Hurst, Ree and Orme, Paternoster Row.

Engraved by Wilson Lorry.
COTTON MANUFACTURE.
ROVING FRAME, Plate 1st.

These cans contain the shives brought from the Drawing frame.

Horizontal Plan of the Machine called Double Speeder.

Published as the Act directs, 1814, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.

Engraved by Wilson Lowry.
COTTON MANUFACTURE.

REELING.

Machine for winding sewing cotton into Balls.
Fig. 1. Two Troughs of a Grinding Mill.

Fig. 2. Tongs for pressing Knife Handles.

Fig. 3. Spring Drill.

Published as the Act directs, 1811, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.

Engraved by Wilson Lowry.
DIALLING.

Cylindrical DIAL, Fig. 28.

Portable DIAL.

Universal DIAL on a Cross.

Published at the 924 Strand, this by Longman, Reed, Bros. & Green, Bookellers, New London.
PLAN OF THE DOCKS AT LONDON, IN 1808.
From a Bust in the Collection of Charles Townley Esq.
From an original Drawing by Gaspar Poussin in the Collection of Benjamin West Esq.'P.R.A.'

Published by Longman, Hurst, Rees & Orme, Paternoster Row, May 1st Day.
From an original Drawing by Gaspar Poussin in the Collection of Benjamin West Esq. P. R. A.

Published by Longman, Hurst, Ree, & Orme, Paternoster Row, May 1st, 1818.
DRAWING INSTRUMENTS.

COMPASSES.

For Fig. 6 of this Plate see Plate TURNING, Fig. 20.
DRAWING INSTRUMENTS.

OVAL.

M. F. Eury's Elliptograph for drawing Ellipses.

Fig. 3.

Fig. 4.

Fig. 5.

Sir Howard Doull's Reflected Protractor.

Fig. 6.

Fig. 7.

Published as the act directs, 1865, by Longman, Hurst, Brown, Orme & Brown, Paternoster Row.
ELECTRICITY.

ELECTROMETER.

Published as the Act directs, 1st Nov. by Longman, Hurst, Rees & Orme, Paternoster Row.

Engraved by Wilson Lowry.
ELECTRICITY.

ELECTROMETER.

For Figs. 13, 14, & 15. see Pl. XII.

Fig. 16.

Fig. 17.

Fig. 18.

Fig. 19.

Fig. 20.

Fig. 21.

Fig. 22.

Fig. 23.
ENGINE.

M. R. SALMON'S WEIGHING MACHINE.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Published as the Act directs, Jan'3, 1803, by Longman & Rees, Paternoster Row.

Engraved by William Lowry.
ENGINES.

Cutting Engine by Hindley.

PLATE II.
ENGINES.
For sharpening Cutters.

BY REHE.

Published as the Act directs, 1846, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.

Lowry Sc.
ENGINES.

A perspective View of M. Ramsden's dividing Engine.

PLATE VII.
FARRIERY.
HORSE SHOEING.

Genuine fore Shoe, or S. Bell's Shoes.

Racing hind Shoe.
Racing fore Shoe.

Frost Shoe.
Shoe to prevent cutting.

Hind Shoe.

Fore Shoe with a joint in the toe.

Published as the Act directs, 1808, by Longman, Hurst, Rees and Orme, Paternoster Row.
Engraved by Wilson Lowry.
Fig. 1.
FORTIFICATION
Irregular

Fig. 2.
FORTIFIED PLACE

Fig. 3.
PROFILE of a FORTIFICATION.

Fig. 4.
NAMES of the WORKS.
a. Glacis or Declivity.
b. Cover-way.
c. Counterscarp.
d. Single Terrille.
e. Double Terrille.
f. Terrille in the Ditch.
g. Horn Work.
h. Places of Gifts.
i. The Moat or Ditch.

NAMES of the APPROACHES.
1. Trench of approach.
2. Lines of Communication.
5. a Sap.
6. a Mine.

NAMES of the CHEMICALS.
1. Ravellins.
2. Half Moons.
4. Siphon or Private Way.
5. Counter Guard.
8. Curtain.
9. Bumpart or Wall.
10. Bridges.

Fig. 4 see another PL. V.
A. B. Battlements.
C. Barbette.
D. Line of Communication of the Attacks.
E. First Parallel.
F. Second Ditch.
G. Third Ditch.
H. The Approaches.
I. Pieces of Orms.
K. Square Redoubt to prevent Sallies.

L. Traverse in the third Parallel.
M. Batteries (of Cannon & Mortars).
N. Glacis.
O. Places of Orms in the covert way.
P. The Ditch.
Q. Bridge of Communication.
R. A River.
S. Rising Ground.

Published as the Act directs, (1811), by Longman, Hurst, Rees, Orme and Brown, Paternoster Row, London.
FURNACES.

Furnaces used by M. Mouchot for his experiments on Iron & Steel.

Fig. 1.

Fig. 2.

Section of the Tobacco pipe makers Furnace.

Fig. 3.

Fig. 4.

Plan. Fig. 5.

Published at the Act direct, 1846. by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.

Lowry, Sc.
FURNACE.

Furnace for Enamelling Watch Dial Plates.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

Fig. 10.

M' Bone's Enamelling Furnace.

Scale of Foot.
GARDENING.

HOT-HOUSE.

Fig. 1. Elevation.

Fig. 2. Plan.

Sheds for Utensils.

Foot path.

Fig. 4.

Fig. 5.

Fig. 3.
GEOMETRY.

EXTREME & MEAN PROPORTION.

FRUSTUM.

Published as the Act directs also by Longman, Hurst, Rees, & Orme, Paternoster Row.

Engraved by William Lowry.
GEOMETRY.

Fig. 1. SOLID ANGLE

Fig. 2. SOLIDITY

Fig. 3. SPHERE

Fig. 4. SPHEROID

Fig. 5. SPIRAL

Fig. 6. SQUARC

Fig. 7. STAFF

Fig. 8. STEREOMETRIC Projection

Fig. 9.

Fig. 10.

Fig. 11.

Fig. 12.

Fig. 13.

Fig. 14.

Fig. 15.

Fig. 16.

Published as the Act directs, 1816, by Longman, Hurst, Rees, Orme, & Brown, Paternoster Row.
HERALDRY.

PLATE V.

Statham
Canton
Blasius
Bulac
Bathurst
Berlin
Bertram
Bredon
Bredon

Allerton
Thornden
Withern
Harefield
Grimby

Throckmorton
Windover
Handford
Grimby

3 BENDLES & 3 CARPETS charged with a CHEVRON.
2 BENDLES & 3 CARPETS charged with 2 CARPETed SPOTS.
2 BENDLES & 3 CARPETS charged with a CHEVRON.

3 BENDLES & 3 CARPETS charged with a CHEVRON.
3 BENDLES & 3 CARPETS charged with a CHEVRON.
3 BENDLES & 3 CARPETS charged with a CHEVRON.

2 BENDLES & 2 CARPETS with the Handle of a Fleece.
2 BENDLES & 2 CARPETS with the Handle of a Fleece.
2 BENDLES & 2 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.

3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
3 BENDLES & 3 CARPETS with the Handle of a Fleece.
HERALDRY.

Achievements borne at the Interment of the R'Hon Wm. Pitt Earl of Chatham & Viscount Pitt, solemnized in Westminster Abbey at the Public Expense, on Tuesday June 9th, 1778.

The Standard

The Banner of the Barony of Chatham

Targe & Sword

The Great Banner

Banner of the Arms of Pitt and Grenville

The Coronet on a Black Velvet Cushion

Banner of the Arms of Grenville and Temple

Helmet & Crest

Banner of the Crest of Pitt with Emblems

Surcoat

Banner of the Arms of Pitt with Emblems

Published as the Act directs, April 7th, 1808, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.
DISTINCTIONS OF HOUSES

FIRST HOUSE
First Son
Second Son
Third Son
Fourth Son
Fifth Son
Sixth Son
Prince of Wales
Duke of York
Duke of Cumberland
Duke of Sussex
Duke of Clarence
Duke of Kent
Duke of Cambridge

SECOND HOUSE
Princess Mary

THIRD HOUSE
Princess Sophia

FOURTH HOUSE
Princess Amelia

FIFTH HOUSE

SIXTH HOUSE
Princess Sophia Matilda of Gloucester

FIRST HOUSE CONTINUED
Seventh Son
Eighth Son
Ninth Son

BADGES OF BARONETS

BADGE OF BARONETS OF ENGLAND & IRELAND

BADGE BORNE BY H.H. DUKE OF YORK AS BISHOP OF ORKNEY.
HOROLOGY.

CLOCK-MOVEMENT.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Published as the Act directs, June 15, 1806, by Longman, Hurst, Rees & Orme, Paternoster Row. Engraved by Wilson Lowry.
HOROLOGY.

Portable eight days Clock.
HOROLOGY.

DIAL WORK AND STRIKING PART OF AN EIGHT DAYS CLOCK.
HOROLOGY.

CLOCK WITH CHIMES.

Published by Longman, Hurst, Rees & Orme, Paternoster Row.

Engraved by Wilson Lowry.
HOROLOGY.

CLOCK WITH CHIMES.

PLATE 111

J. Forry. Sc.
HOROLOGY.
CLOCK TOOLS.

Fig. 1.
Fig. 2.
Fig. 3.
Fig. 4.
Fig. 5.
Fig. 6.
Fig. 7.
Fig. 8.
Fig. 9.
Fig. 10.
Fig. 11.

Published as the Act directs, 1816, by Longman, Hurst, Rees, Orme and Brown, Paternoster Row, London.
HOROLOGY.

ASTRONOMICAL CLOCK BY REID.

Published as the Act directs, 1816. by Longman, Hurst, Rees & Orme, Paternoster Row.
HOROLOGY.

Astronomical Clock by Meis & Brockbanks.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Published as the Act direct, 1828. by Longman, Hurst, Rees, Orme, & Brown, Paternoster Row.

Engraved by W. Lowry.
HOROGRAPHY.
COMPENSATION CURBS.

Published as the Act directs, May, by Longman, Hurst, Rees & Orme. Paternoster Row.
Engraved by Wilson Loery.
HOROLOGY.

COMPENSATION CURBS AND BALANCES.

MT. Scott's.

MT. Cumming's.

MT. Hardy's.

MT. Hardy's balance.

MT. Hardy's Isochronal compensation.

Berthoud's.

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Published as the Act directs, 1817, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.

Lowry Sc.
HOROLOGY.

New DIAL work of a small spring Clock shewing the Phenomena of the Moon, &c.

Fig. 1.

Fig. 2.


Published at the Act direct. 1815, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row.

Engraved by Wilson Lowry.
H O R O L O G Y.
ESCAPEMENTS.

PLATE XXI.

Fig. 1.

Fig. 2.

Fig. 3.

M. Atwood's Theory of the Balance.

Crown Wheel.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

Huygens's.

D. Hook's & Du Tertre's, Fig. 8.

Published as the Act directs, 1746, by Longman, Hurst, Rees, Orme & Brown, Paternoster Row, London.
HOROLOGY.
FRENCH ESCAPEMENTS for Chronometers.

Fig. 1.

Peter le Roy’s
Improved

Fig. 2.

Fig. 3.
The balance is in its quiescent position.

Fig. 4.
Berthoud’s
Detached

Fig. 5.
Berthoud’s
Improved
P:1:60.

Fig. 6.
Berthoud’s without
a Spring

Fig. 7.
Berthoud’s with
Spring and
tangent in
9.

Fig. 8.
Berthoud’s
Isochronal
HOROLOGY.

ESCAPEMENTS.

Mudge's Fig. 1.

Margett's Fig. 3.

Robin's Fig. 4.

Duplex Fig. 5.

Escapement a Virgule

Free for a Pendulum

Tompion's Fig. 7.
HOROLOGY.

FUSEE ENGINE acting by an inclined Plane.
HOROLOGY.
COMPENSATING PENDULUMS.

Fig. 1. Ellicott's
Fig. 2. Troughton's Ellipsoidal
Fig. 3. Berthoud's
Fig. 4. Troughton's Mercurial
Fig. 5. Dr. Fordyce's

Fig. 6. Bichard's
Fig. 7. Ward's
Fig. 8. Leidy's
Fig. 9. Doughty's

Published as the Act directs, 1816, by Longman, Hurst, Rees, Orme, & Brown, Paternoster Row.
Remontoire Escapements

Fig. 1

Fig. 2

De Laron's

Fig. 3

Mason's

Fig. 4

Mendham's

Fig. 5

Fig. 6

Fig. 7

Prior's

I Peray delin.

Published as the Act directs, 1816, by Longman, Hurst, Rees, Orme, & Brown, Paternoster Row
HOROLOGY.

Fig. 1.

Recordon's Renovator.

Fig. 2.

Fig. 3.

Fig. 4.

WATCH with MUSIC.

Fig. 5.

Fig. 6.

Fig. 7.

Fig. 8.

Fig. 9.

Published as the Act directs, by Longman, Hurst, Rose, Orme, and Brown, Paternoster Row.

J. Farrey delin.
HOROLOGY.
REPEATING WATCHES.

Fig. 1.

Fig. 2.

Insallible Repeater by M. Berrollas

Fig. 6.

Fig. 7.

Calliper

Detached parts

Published as the etchings stip'd by Longman Hurst Rees Orme & Brown Paternoster Row

J. Pegg Jun., etch.