

THE
LABORATORY;
OR,
SCHOOL of ARTS:

In which are

Faithfully EXHIBITED, and fully EXPLAINED.

<p>I. The Antiquarian, or curious Examiner of ancient Coins and Medals.</p> <p>II. A short Introduction to the Art of Drawing in general with an Essay on designing and drawing Patterns for the Flower, Silk Manufactory, Embroidery, and Printing.</p> <p>III. The Art of Painting in Oil colours, and Menzoniatores on Glass.</p> <p>IV. Introductory Rules for finding the natural Shadows of the Sun, likewise those of the Torch, Lamp, or Candle.</p> <p>V. Of Water-works, Fountains, and Grottoes, in Miniature, for grand Entertainments.</p> <p>VI. The Art of Dialling, or of making of Sun-dials.</p> <p>VII. A Collection of choice Receipts, and Experiments of various Kinds,</p>	<p>relating to the Produce of Gardens, or Flowers, Fruits, &c.</p> <p>VIII. A Directory for the Management of a Fruit, Flower, and Kitchen-garden, through every Month of the Year.</p> <p>IX. Optical Experiments, by Means of which the most surprising and incredible Performances are exhibited, for the Entertainment of the Curious.</p> <p>X. The Art of Distilling of Liquids, Cordials, &c. in all its Branches.</p> <p>XI. A short Introduction to Civil Architecture, or the Art of Building.</p> <p>XII. The Art of Refining, Tanning of Leather, and Dying of Skins in various Colours: Of Fire-works, Colonnades, Perfumes, &c. &c.</p>
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WITH

A great Number of other scarce and valuable Secrets.

Compiled for the Use, Benefit, and Entertainment of the Curious :

Illustrated with a Variety of curious COPPER-PLATES.

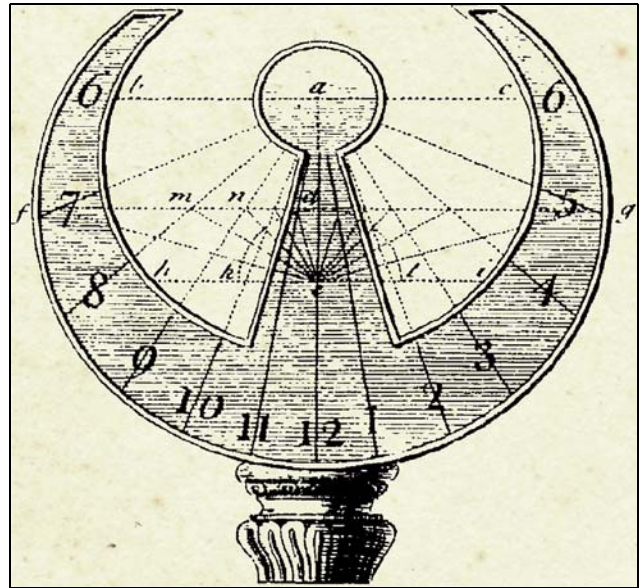
By G. SMITH.

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L O N D O N

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MDCCLVI.



A Direct Meridian Vertical Sun-Dial

PROBLEM X.

To make a horizontal sun-dial.

PROBLEM XI.

To make a sun-dial in the shape of a cross, which shall shew the hours, without a gnomon or style.

PROBLEM XII.

To make a sun-dial in a ring.

PROBLEM XIII.

To make a moveable universal sun-dial on a Globe.

PROBLEM XIV.

To make all manner of sun-dials, regular, or irregular, either on a smooth or raised surface.

To prepare plummets of great use in placing and fixing of sun-dials.

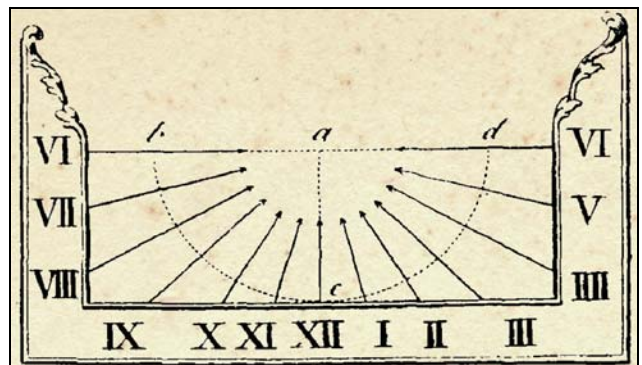
PROBLEM XV.

To see by the shadow of the moon on a sun-dial what time of night it is.

Of painting of sun-dials.

How to prepare or make artificial magnets.

A method how to obtain magnetism by means of three iron bars.



*An Inferior Equinoctial Dial
(by using equal angles for each hour division)*

"THE LABORATORY; OR SCHOOL of ARTS" contains the following section on Dialling:

PART VI.

GNOMONICKS ; of the Art of DIALLING.

PROBLEM I.

1. How to prepare the fundamental quadrant for erecting of sun-dials.

PROBLEM II.

To prepare a superior equinoctial dial.

PROBLEM III.

To make an inferior equinoctial-dial.

PROBLEM IV.

To make a superior polar-dial.

PROBLEM V.

To make an inferior polar sun-dial.

PROBLEM VI.

To make a direct erect oriental sun-dial.

PROBLEM VII.

To make an erect direct occidental sun-dial.

PROBLEM VIII.

To make a direct meridian vertical sun-dial.

PROBLEM IX.

To draw a septentrional direct vertical sun-dial.