CATALOGUE

OF

Optical, Mathematical, and Philosophical Instruments,

W. AND S. JONES,

No. 30, LOWER HOLBORN, LONDON.

O. O. C.			Se 12	
OPTICAL INSTRUMENTS.		£. s.	. 2.	
BEST double-jointed standard gold spectacles, with peb-	Baco	STATE BY	N. P.	
oles, and fish-skin gold-mounted case.	10	12	0	
Jewellers gold ditto, without case, from 3/ 13c 6d to		7	0	
Standard, single-jointed, ditto with gold-mounted case	100000000000000000000000000000000000000	8		
Jeweller's gold ditto, without case, from 2/ 12c 6d to	5		0	
best double-jointed silver ditto, with pebbles	1	16		
Ditto, ditto, with glasses	1		0	
Ditto, frames silver gift	1	11	6	
Descring to formed silver, with bennies	1	8		
Ditto, with plasses	o		44000	
Dest double-formed steel ditto, with glasses	0		0	
Common ditto		5	6	
Dest single-jointed steel spectacles, with fish-skin case	10000	5		
occond best ditto	0		6	
Tortoiseshell spectacles, silver-jointed with pointed and			U	
other snaped sides, peculiar for their lightness and unin	OW-	does		
terruption of dressed hair, in morocco leather cases	0	10	6	
Ditto, double-jointed frames		16		
spectacles for eyes that have been couched from 5c to		7	0	
Ditto, with green glasses for very weak and inflamed ever	61	sta	6	
according to the frames, from 0s, to	1	1	0	
Ditto, for the same purpose, with new contrived portable		ecent	U	
shades to screen the eyes from candle, or other light		15	0	
spectacle cases in great variety, from 3d, each to		16	2501010	
Concave glasses for short-sighted persons, in horn cases	VI VICT	2	0	
Ditto, in tortoiseshell, pearl, silver, &c. from 2c to	2		0	
Ditto in new contrived frames for shooting caps		16		
ongle concave or convex eye-glasses, mounted in silver	039		0	
ring frames	0	6	6	
Ditto, in gold frame, 11.1s. to	2	12	6	
A new contrived folding-joints do. to answer as a single,	100			
or spectacle-kind hand-frame, in silver	1	1	0	
Ditto, in gold, from 31. 3s. to	5	5	0	
Reading and burning glasses in various mountings, from 3s.to	1	16	0	
Glasses for watch-makers, engravers, &c. from 1s. 6d. to	0	10	6	
July, 1822.	32	TRUES.	177	

	•		,
	£.	5.	~
Gogglers, to guard the eyes from dust or wind	0	4	6
News green light shades for the eyes	0		6
Opera glasses in great variety of mountings, from 05. 04. 10	3		0
Ditto on an improved construction of glasses, plain mounting		5	0
REPRACTING TELESCOPES of various lengths, 10s. Od. 10	NUMBER OF STREET	18	0
Two feet day and night best achromatic telescopes		13	6
Do large aperture best night Telescopes	2	16	0
A chromatic stick telescopes, of various lengths, from 17.15.10	5	5	0
The new improved one-toot ditto, with three sliding brass			
tubes by which an instantaneous view of the object is ob-			
tained, and shuts up to a short length for the pocket	1	15	0
Second best two drawers ditto	1	1	0
Twenty inch best three-drawers ditto	2	12	6
Two feet best three-drawers ditto	3	13	6
Three feet best five-drawers ditto	5	15	6
Four feet five-drawer best ditto	8	8	0
The preceding telescopes fitted up elegantly with silver or	A.	100	
plated tubes, from 2l. 2s. to	21	0	0
Astronomical eye-pieces, and portable brass stands for the		1404	ZSI.
above, from 10s. 6d. to	2	12	6
The improved $2\frac{1}{2}$ feet achromatic refractor, on a brass			
stand, mahogany tube, with three eye-pieces, two magni-			
fying about 40, and 50 times for terrestrial objects, and			
tying about 40, and 50 times for astronomical purposes.			
the other about 75 times for astronomical purposes,	10	10	0
in a mahogany case	11	11	0
Ditto, ditto, the tube all brass, with three eye-pieces	16		
Ditto, with vertical and horizontal rack work motions	18	18	0
The 31 feet ditto, plain mahogany tube		MARKET STATE	
Ditto, ditto, brass tube	26	C 200.75	Children A Park
Ditto all in brass, with rack-work motions, &c	20		
Ditto, the object glass of the largest aperture, and the	27	16	0
rack-work motions on an improved principle	31	10	
Ditto, fitted up with equatorial motion, framed mahogany			
stand, divided altitude and azimuth arches, or declina-	90	0	0
tion and right ascension circles, &c. &c. from 601. to	100	0	0
A 5 feet ditto, from 84l. to	100		
Achromatic perspective glasses for the pocket, in brass, &c	. ,	9	0
tubes, with a change of eye-glasses, from 12s. to	3		, ,
Improved ditto, answering as an opera glass, with a com			0
and helioscope for viewing the sun, from 11.35. to.	. 4		
at improved achromatic pocket telescope, which, by	a		
amall apparatus within its tubes, is readily converted in	U		3 6
a small compound microscope		3 13	0
A served portable 7-inch achromatic telescope in Dras	,		
the stand that packs up into the tube of the telescope	- 9		. 0
and a nower for astronomical uses			4 0
Dans noming Triescopes, fitted up either upon the Grego	1-		AT A
Magnifornia or Herschellan Drinciples, Will implove	u		100
1 ametal stands and other apparatus, for making	5		
lestial observations in the most commodious and acce	- Table		
- Prices of various lengths and apertur	C,	•	0 0
from 100/. to	100	U	0 0

Γ .	S.	d
The large reflectors upon the usual Gregorian construction are made w		
The large reflectors upon the usual Gregorian construction are made	1000	1
vertical motion upon a new principle, so as to render them more fin	111 -4	nu
steady while in use, than any reflectors mounted in the common man	ner.	
A four feet, 7-inch aperture, Gregorian reflector; with	N 4 4 5 E	Y .
the vertical motion upon a new-invented principle, as	EXECUTE A	7
well as apparatus to render the tube more steady in ob-	67 CL CV	
servation; according to the additional apparatus of small	OW 4	
servation; according to the additional apparatus of small	0	
speculums, eye-pieces, micrometers, &c. from 80l. to100	0	0
Three feet long, mounted on a common brass stand, 23	2	0
Do. with rack-work motions, improved mounting, and metals 39	18	0
Two feet long, without rack-work, and with four magnify-		
ing powers, improved	15	0
D'44 immed with male work motions	1	0
Ditto improved, with rack-work motions 22		
Eighteen-inch on a plain stand 9	9	0
Twelve inch ditto	0	0
Telescopes, both refracting and reflecting, fitted up with equa-	S. Trial	
torial, &c. motions, micrometers, adjusting, compensating,	Townson.	
&c. apparatus, for the most accurate astronomical purposes	27.74	
Micrometers, upon the best principle, adapted to either of		
Micrometers, upon the best principle, adapted to erther of	0	0
the refracting or reflecting telescopes, from 31.1 3s. 6d. to 21	0	0
MICROSCOPES, common sort, from 5s. to	f	0
Wilson's single pocket microscopes, from 11. 4s. to 3	13	6
Compound microscopes, common construction, from 31.3s. to 5	15	6
	7	0
Ditto with the most complete apparatus, from 111. Os. 6d. to 12	12	0
A new illuminating apparatus of a lamp, lens, and silver		1
A new mummating apparatus of a temp, tem, and siver		
speculum, for exhibiting the opake objects of any com-		•
pound microscopes, in a very brilliant manner 2	0.000	0
Solar microscopes in brass, improved, from 51. 5s. to 6		0
The new opake and transparent solar & single microscopes, 12	12	0
Ditto, larger size, with additional megalascopic apparatus, 19	19	0
Solar and best compound, combined in one case 24	3	0
A new lanthorn night microscope with apparatus, to repre-		5
sent the object on a screen or plate of roughed glass 7	17	6
sent the object on a screen of place of roughed glass	The state of the s	
	10	0
The LUCERNAL MICROSCOPE, as improved by W. Jones,		
exhibiting images of opake and transparent objects, by		
night or day, in a manner singularly pleasing, brilliant,	Part C	
and distinct, with upwards of 100 objects, proper appa-	. Stati	
ratus, Argand's lamp, &c	18	0
Ditto combined with solar, compound, &c. apparatus, form-		1
ing a perfect collection of microscopical apparatus 39	18	0
ing a periect confection of interoscopical apparatus by	10	
A portable optical apparatus, consisting of a scioptic ball		
and socket, a solar microscope, Wilson's microscope, a		
pocket compound microscope, a pocket telescope, and solar		
telescope, in mahogany and brass, with directions 4	4	0
	12	6
	11	-
A new universal pocket ditto, adapted to all sorts of objects	8	
Ditto with a livetime severy eilver proceedings	10	
		-
Microscopes to examine cloth, from 4s. 6d. to	10	6

L 2 1		_		
	1	ζ.	5.	d.
For descriptions of all the most improved Microscopes, see the late	Mr.	G. 1	ADAI	MS"
Essays on the Microscope, corrected and improved by F. KANMA	CHER	, F.	L.S. 4	10.
with 33 folio plates. Price 11. 18s. boards.				
Magic lanthorns, with various mechanical figures, for ph		-	-	
tasmagoria, &c. from 11. 4s. to		6	6	0
Do. with a new set of moveable painted sliders, shewing	the			
fundamental principles of astronomy, with the real	and			
apparent motions and positions of the planets, stars,	&c.	1		
accompanied by a proper improved lanthorn, complete	South B	15	15	0
Single sliders for magic lanthorns, each		0	5	0
Ditto, with astronomical diagrams, 21 subjects, each		0	6	0
Small magic lanthorns, with 12 sliders of English painti		2		0
O i 1 1 1	ngs	DOM	10	
Optical diagonal machines for viewing prints, from 11. 5s	. 10	2	2	0
Perspective views in great variety for ditto, each		0	1	9
Scioptic balls and sockets, for camera-obscuras, from 15s	. to		The late	6
An artificial eye in brass, to exemplify the nature of vis	ion		15	0
For a description of the principle of this instrument, as well as of s	pectac	les,	read	ing
glasses, &c. see G. ADAMS's Essay on Vision, 8vo. price 5s.			3311	_
Camera-obscura for the pocket, from 12s. to		3	3	0
A new-invented folding ditto, in portable morocco leather of	ase	2	10	0
Large do. shutting up as a portable chest, the objects rep	re-	44		
sented on paper, with print apparatus, from 51.15s. 6d	. to	6	16	6
Concave and convex glass mirrors, truly ground, in pl	ain			
black frames, four, five, six, and seven inches diame	ter,	25		
each 10s 6d. 14s. 16s. and		1	0	0
Eight inches diameter ditto			6	0
Nine inches ditto			10	0
Ten inches ditto		100	16	0
Twelve inches ditto			5	0
Fifteen inches ditto			0	o
			16	6
Eighteen inches ditto				
Twenty one inches ditto		Out of the last	9	0
Twenty-four inches ditto			12	0
Twenty-eight inches do	. 2	21	0	0
Thirty inches do	. 3	31	10	0
Concave mirrors ground cylindrically, possessing seve	ral	S. B	15000	
curious properties in the deformation of objects; 11. 5s.	to	3	3	0
Glass prisms, plain or mounted on stands, from 10s. 6d.	to	1	11.	6
A curious set of optical models, where the rays of light	are	in.	1530	F
represented by variously coloured silken strings, and	il-			
lustrating the principles of vision, telescopes, prisms,	c.			
packed in case		7	17	6
A new instrument to shew the polarisation of light,		•	- "	
diaphanous bodies, from 21. 2s. to	J	.5	5	0
OPTICAL RECREATIONS.—An optical paradox containing			-	~
OPTICAL RECKEATIONS.—An optical paradox containing	5	47		
two perspectives, between which a board may be place	u	0	10	G
and the object will yet be seen through them		U	10	0
An optical deception, containing from six to twelve differen	JE .		NEWS.	
paintings, which are looked down upon through a pe	r-	310	A PERM	8
spective, and immediately there appears another ver	У	1 1	THE !	
different object, without any alteration of the instru	1-	47		1
ment whatever or concern of the person using it, from	m		1000	1
11. 11s. 6d. to		3	3	0
A diagonal opera glass, that shews persons on one sid	le	3		
when it is presented in another direction 7s. 6d. to		0	15	0

*	L. C. J.	4	5.	1.
	Multiplying glasses, making one object appear many, 3s. to		10	4-2
	A set of six coloured anamorphoses, or deformed pictures, rectified by a polished metallic cylinder	2	12	6
	MATHEMATICAL INSTRUMENTS.		124	
	THEODOLITES of the common, four-sights, construction, and			
	of the best workmanship, from 4l. 4s. to	10	10	0
	A portable theodolite with a telescope, level, and vertical arch	8	8	0
	Ditto larger with parallel plates, &c. divided to three minutes	12	12	0
	Ditto with rack-work motions, divisions to a minute	15	15	0
	A 4-inch improved ditto, by which the vertical and nori-			
	zontal angles are shewn at the same time, with rack-work	11	11	0
	motions, and portable parallel plate staves, &c A new-improved seven-inch theodolite, with two achromatic	100		
	telescopes, and contrivances for very accurate adjustments	33	12	0
ï	A Nine inch ditto	42	0	0
	A 6 inch ditto, with one telescope	22	1	0
	A Twelve inch repeating circle, on the French construction	60	0	0
	An Eighteen inch dittoditto	90	0	0
	Circumferentors much used in woody countries, from 21, 25. to	4	4	0
	An improved ditto, contrived to answer the purposes of a	-	1'5	6
	common theodolite, level, altitude instrument, &c		15	0
	Ditto, with rack-work motions, and used for mining	7	11	6
	Surveying crosses or squares, on a staff, from 10s. 6d. to A brass cylindrical ditto, with a staff		18	0
	Ditto with compass, agate capped needle, &c		11	6
	W. Jones's Improved ditto, with rack-work and pinion, and			
	moveable divided limb, making a very portable cross-staff,			
	compass and theodolite, in one small instrument	2	18	0
	Common six-inch spirit levels, in brass from 9s. to		11	6
	Spirit levels, with 12 inch telescope and parallel plate staves	3 1 3 2	15	6
100	Ditto, with achromatic telescope and best adjustments		16	6
	Ditto, with eighteen-inch telescope and circumferentor		9	6
*	Two-feet ditto	and the second	14	0
	Strong ditto, most accurate and durable kind			
	velling	2	18	0
	Plane tables, with index, sights, &c. complete, from 41.14s.6d. to	6	16	6
	Pantagraphs, by which any person unskilled in drawing may			
Ť	copy plans, surveys, profiles, drawings, &c. in any pro-	-		•
	portion to the original, one to three feet in length, 11.18s. to	0	16	6
	Perambulators or measuring wheels, upon an improved prin-	10	10	0
	ciple, from 71. 17s. 6d. to	10	10	· ·
	A new pocket map-meter, that correctly and expeditiously			
	measures routs, boundaries, cross-roads, &c. of maps and plans, from 11. 10s. to	2	12	6
	Gunter's four-pole stout measuring chain,	10000	12	0
	two-feet navigation scale, from 3s. to	.0	4	0
	ditto improved by Donn, with directions	0	6	Q
	two-feet sliding navigation scales	0	9	0
	three-feet ditto improved by Robertson, with brass	1	1 "	0
	adjusting screws, &c. being the completest scale of the kind	1	15	0

	f.	5.	d.
Gunter's sectors of various lengths, wood or brass from 2s. to	5	5	0.
A new pocket 10-inch box sliding rule for solving all sorts of		Pa.	
problems in trigonometry, mensuration, engineering &c	0	4	6
Measuring tapes, 1, 2, 3, and 4 poles, 6s. 7s. 6d. 9s. 61 to	1	0	0
Pedometers to ascertain distances by carriages &c. 21.12s.6d.		0	0
Miner's compasses in wood or brass for working in subterra-	10		
neous grounds, from 11. 16s. to	7	4	0
Cases of drawing instruments, from 5s. 6d. to	7	7	0
Magazine, or complete collection of every kind of useful	6	0	0
drawing instruments, from 51.5s. to	06		-
	30	19	U
A new portable drawing board and seat, the board folds up			
for the pocket, and the legs of the seat form a walking stick	1	1	0
Proportional compasses, from 11. 11s. 6d. to	3	3	0
Elliptical compasses of various degrees of perfection and uti-			
lity, from 1l. 1s. to	5	5	0
Farey's newly constructed pocket elliptic machine, in brass,			
for describing ellipses, in the most accurate manner	4	14	6
Triangular compasses, by which three points at once may be			
transferred, from 13s. to	1	5	0
Hair compasses that take extents to a great accuracy	0	7	6
Beam compasses for dividing large circles, projections, &c.			
from 11. 8s. to	3	13	6
Bow compasses for describing very small circles, from 3s. 6d. to	0	6	0
Perspective compasses to take the relative positions of objects,			
angles, &c. to be transferred on paper	1	18	0
Parallel rulers of different constructions, from 2s. to		12	6
Protractors of brass for laying down angles, from 2s. to	1		0
Ditto circular with a nonius and moveable index	2		0
Ditto, ditto, very best with rack and pinion	1	4	0
Sets of protracting and plotting scales; instruments for divid-			U
ing or transferring lines. For describing circles from four			
to six feet radius or to the utmost conceivable distance—			
Gunners callipers - Gunners levels or perpendiculars-			
Shot gauges—Shell ditto—Gunners quadrants, with a			
plummet or level, and adjusting screw, &c. and all other		the second	
instruments for graphical and military purposes.			
HADLEY'S QUADRANTS, mahogany, the divisions on wood	0		
Ditto mahogany with ivory arch and nonius, double observation	2	10	0
Ditto, ebony and brass, best glasses, engine divided, &c	2		6
Ditto, with tangent and adjusting screws, &c	3	Lincoln Pro-	0
Ebony and brass mounted best sextants, from 41. 4s. to	3	18	0
A ten-inch common brass sextant	8	18	6
	9	9	0
Metal 8, 9, or 10 inch ditto, framed on a principle the least			
liable to expand or strain, with adjusting screws, telescopes,			4
and other auxiliary apparatus, divided to 30",15", or 10"			
the best for taking distances accurately, to determine the			
longitude at sea, &c. from 131. 13s. to	16	16	0
A new 3-in. pocket box sextant, angles to a minute, 31.3s.to	4	4	0
A ten-inch improved reflecting circle, that enables an expert			
observer to obviate the very minute errors of a sextant,			
or by repeating observations, to reduce such errors to im-			-
material quantities, from 18l. 18s. to	26	5	0
Portable brass jointed stands for the sextant or circle, in a			
mahogany case	5	15	6
			EVEN I

	•		,	
Artificial horizons, by parallel glasses in mahogany mounting	F.	5.	a.	
and quicksilver, to take double altitudes by	1	18	0	
Ditto best kind in brass mounting and case	3	3	0	
Gunter's quadrant, in box from 6s. to	1	Value Sale	0	
Steering and amplitude compasses 10s. 6d. to	4		0	
Azimuth ditto improved, of different constructions, 51. 5s. to	12	STREET STREET	0	1
Pocket compasses, in wood, metal, and silver, from 2s. 6d. to Horizontal sun-dials, in brass, made for any latitude, of	3	5	0	
four, five, or six inches diameter, divided into five mi-	10	asen		
nutes of time, each at 8s. 12s. and	0	16	0	
Ditto seven inches	1	1	0	
Ditto eight inches, into two minutes		6	0	
Ditto ten inches, ditto		2	0	
Ditto twelve inches ditto, with equation table	3	13	6	
Ditto fifteen inches, into every minute, thirty-two points of		1.5	6	
Ditto eighteen inches ditto, ditto, with equation table, &c.	10	10	0	
Ditto 2 feet diameter, ditto, ditto,	18	18	0	
A new universal ditto and equatorial, making a very port-			1	
able angular instrument, from 81. 8s. to	21	0	0	
Universal ring-dials, from 14s. to	5	the late and the	0	
Boxes of geometrical solids cut out in wood or glass, for il-				
	15	0	0	
MATHEMATICAL RECREATIONS. The two curious mathe-		Qu'		
matical cubes, one of which is gauged so as to prove it to be larger than the other, yet the larger one will actually	4 3 3 3			
pass through the smaller one, and not in any degree stretch it	1	1	0	
The mathematical paradox, a piece of wood that fits exactly,				
and passes through, a triangle, square, and circle	0	2	6	
A double cone, that apparently rolls up an inclined plane,	700		1	
though actually descending	0	6	0	
The mosaic recreation, or pavements, which by the combi-				
nation of 64 squares, may produce 63,000 changes, with	0	10	6	
explanatory book				
For a general description and representation of the instruments used in survey and other branches of practical geometry, &c. see the late Mr. G. ADA trical and Graphical Essays, the 4th and improved edition by W. Jone 8vo. with thirty-five folio copper-plates. Price 16s.	Ms'	Geo	me-	
ASTRONOMICAL, &c. INSTRUMENTS.				
A portable TRANSIT INSTRUMENT, with a cast-iron stand, to ascertain the rate of chronometers, and clocks, the longi- tude, &c. the axis is twelve inches in length, and the achro-	tirol		in I	
matic telescope about twenty inches, packed in a case		16	0	
Ditto, with a brass framed stand, and other additions Transit instruments of larger dimensions made to order.				
A six-inch brass astronomical circle for altitudes, zenith or polar distances, azimuths, with achromatic telescope, &c.	25	6	0	
A twelve-inch ditto, from 36l. 15s	27 68	A. T. On L.	0	
An eighteen-inch ditto, best	200	C	1000	
Larger astronomical circles for Observatories, made to order.			Hill	
Universal Equatorials, 4 and 6 inch circles 81. 8s. to	13	13	0)
inches according to frame, 2, 2, to	60	2 32	PER	1
O Sept capping or the history was and sent well but well	S STREET	18/7	3116	
treatest according to trainer, 27, 25, to				

Best improved do. with large axis, silver circles, &c		£. s.	d.
The astronomical Clock, Will mercurial or other asset	(SIOAPN2)		- en
batting I chituilli, according to the jerrelling And n	0		
Table of the life			0
and Copermedi systems from 7/ 7, to	MADZV2		^
Transfer of the Committee Congression of a. 1	2000		0
Jones S I W III. I HEW DOFTAble Orrery the talling		15	6
Dicco, the planetalfulli Dall With the above in a	4 1 1 1 1 1 1	8 3	0
Tonday in Soi, a Didile a Tillim Together making the Ar	- 400	3	U
1 or really, packed III poxes, according to the aires	1 142	2.1	Til.
which work, the called a linen globe from 2/ 10. 61.	_	16	6
Ditto, on wood, of brass framed stands from 161 16.		1	0
La complete planetallum lempran and lunarium all al	270.25	21 0	
Ty made in blass, silewing the motione completely by	HOUSE I GO	सार्व का	
work, packed in a manogany case the earth a 0 : 1 1	100000	16	0
		03 50	13 .
cions by wheel-work, exemplifying all the motion	10/2 (40%)	10.0	
phonomena of all the Dianers from 10/ to	12000	0	0
are the motion of		5	0
The New Eighteen Inch British Globes—The Ter-			
restrial, containing all the latest discoveries and commu-			
nications, from the most correct and authentic observa- tions and surveys, to the present time, by Arrowsmith.—			
The Celestial containing the positions of nearly 6000 stars,			
clusters, nebulæ, planetary nebulæ, &c. correctly computed			
and laid down, by W. Jones, from the latest observations			
and discoveries, by Dr. Maskelyne, Dr. Herschel, the Rev.			
1. Williaston, occ.		ALTY .	di.
N. B. These are the best modern 18-inch globes in the English language extant the plates he			
The same of a table till till till the neine an area and the			5 %
are districted by permission to the			
- But Live of Ouseph Dunkt Darr P R C and the D		oro c	
La 1. 171 tto A CI VIII C. A SI I UII OMET BOYOL		1921	
Ill common plain frames of stained wood	8	8	0
and on page in the trampe of diffe		-	0
	1	8	0
The state of the control of the state of the			
The Company of the Company to the co	13	13	0
The state of the s			1
Red and stamped leather covers for the above, from 11.10s. to	18	18	0
The New Twelve Inch British Globes, reduced from	3	13	6
and above, being the most recent and correct of	17 Sec. 22		
and the state of t	0	6	_
TOTAL ALL COMMINICAL MANAGE	6	6	0
and the state of t			0
The second souther covers in him	A STATE OF THE STA	5	0
The largest extent of Carret	U	13	0
Parties, in Edill and Eligish, with the modern discount			
added in chighton, in plant manogany trampo	42	0	0
The state of the s	A .	-	Frank.
			200
Ditto, six and four inches, in plain mahogany frames	2	10	0
		3	0
Ditto, three inches, according to frames, 21. 2s, to	2	17	Q
		1000	

도 보통하다 이번 100mm (100mm) 이 100mm) 이 100mm (100mm) 이 100mm (100mm) (100mm) (100mm) (100mm) (100mm) (100mm) (100mm)			
	to	. 5,	a.
Ditto, terrestrial, in a case for the pocket 10s. 6d. to	0	14	0
Russell's Selenographic 12 inch globe, being a correct globular representation of the Moon's disc		5	
Geographical planispheres, to solve problems, mounted as		3	0
a hand fire screen	0	0	0
A brass armiliary sphere, three inches diameter	3	13	6
A four inch ditto	4	14	-
A six inch ditto	6	6	0
A nine inch ditto	10	10	0
A twelve inch ditto	13	13	0
Larger ditto, with internal planetarium, from 21% to 1	05	0	O
For a general description of orreries and other astronomical instruments Mr G. Adams' Astronomical Essays, 800. with sixteen plates; sixthe 12s. improved by W. Iones.	, sec	the i	late rice

PHILOSOPHICAL, &c. INSTRUMENTS.

아크리아들의 아름다면 하면 하면 하면 하는 아름다면 나는 아름다면 하는데			
A single-barrel AIR-PUMP, with receiver, &c	3	3	0
A siliali double-barrel air-bump, with gauge-plate		15	5
A initialle size alto with glass receivers	~	17	6
A large size table dillo	11	11	0
Ditto, with stage and raised receiver plate		MIRARIA.	
All-pump of the largest sort, exhausting most accurately		.14	0
being upon an improved construction, from 20/ to	20	10	-
large ditto, for the production of ice 59/ 10c to	01		0
Condensing engines, for air, gases, &c. from 7/7; to	01	0	0
Papin's digester improved, with a stand, &c.	21	0	0
The principal Apparatus for the Air Pump, as follow:	4	14	0
Guinea and feather apparatus, demonstrating the resistance			
of the air, with one, two, or three falls, from 18s. to	-		
A set of wind-mills for the same demonstration	2	0	0
The brass hemispheres, shewing the air's pressure, 18s. to.	1	14	0
A bell, proving that there is no sound without air	13790	10	0
Improved construction of this bell	0	10	6
Lead weights with bladder & proving the	. 1	1	0
Lead weights, with bladder, &c. proving the air's elasticity. The double transferrer, that transfers a vacuum, &c. from one	0	17	0
receiver to another by turning stop seels a vacuum, &c. from one			
receiver to another, by turning stop-cocks only	3	0	0
A model of a water-pump, exemplifying the nature of			
pumps, and proving the absurdity of what is called suction.	1	10	0
Improved forcing do. for a constant stream	3	3	0
A single transferrer, plate, and pipe, for a fountain	1	0	0
A copper air-pipe for experiments on infected air or gases.	0	18	0
A flat plate, collar of leathers, with sliding wire, for placing			
on receivers	0	12	0
An apparatus for firing gunpowder in vacuo	0	18	0
A copper bottle, beam & stand, for accurately weighing air	2	12	6
It glass vessel for making a fountain in vacuo	0	5	6
Ditto on a larger and different construction	0	16	0
A glass with a bladder, shewing the action of the lunger	0	6	6
The mounted with the figure of a Bacchus	1	12	0
The balance bealth and stand	4	7	6
A filtering cup, shewing the porosity of vegetables		5	0
			-

	E 10 J	C.	5.	d.
	A - I-t I		4	
	A plate and piece of wood for the same purpose		18	0
8	An apparatus for striking flint and steel in vacuo		18	0
	The Torricellian Barometrical experiment		3	6
	Fruit stand	0		6
	Candlestick	MARKE BE	10	6
	Syringe with lead weight	0		6
	Six breaking squares, cage and cap		3	6
	Glass bubble and stand		4	6
	Hand and bladder glasses	0		6
	A receiver, dish and stand for congelation of water			
	With a great variety of receivers, and other apparatus, to	1	11	6
	L'Allaustille and condensing by the	-	11	
	Exhausting syringe, with set of cupping glasses, breast	1	1.1	6
	glass, and scarificator, complete	4	14	v
	Air fountains of copper, with syringe and various jets,	10	10	0
	from 5l. 15s. 6d. to	10		
	Cylinder electrical machines, from 31. 13s. 6d. to	10		0
	Large standing ditto, from 15l. 15s. to	52	10	0
	Twelve-inch glass plate ditto, with brass branch conductor,	-	1 =	6
	best mounting	-	15	6
	Eighteen-inch plate ditto ditto	1 Brown 550	17	6
	Two-feet ditto ditto	12		0
	Three to five-feet ditto, from 211. to	63	U	0
	An electrical machine, with apparatus, for philosophical			-
	experiments and medical uses, packed in a box, the cy-	- 6		
	linder from six to ten inches diameter, from 01.108.00. to	10	10	U
	Apparatus for Electrical Machines as follow:	4. 65		
	Electrical batteries of combined jars, from 21. 12s. od. to	20	0	0
	An universal discharger, with a press	1	8	0
	A quadrant electrometer with divided arch	0	7	6
	Jointed discharger with glass handle	0	10	6
	An useful and illustrative apparatus, compounded of the lu-			
	minous conductor, exhausted flask, two jars, exhausting			•
	syringe, insulated stand, and wires with balls, &c. complete	3	3	0
	Laminous conductors, from 12s. to	1		0
	Exhausted flasks, called the Aurora Borealis	0	6	6
	A thunder house, demonstrating the use of conductors	0	6	6
	A powder house for the same purpose	U	16	0
	An obelisk or pyramid for ditto	O	10	6
	A set of plain bells, three to a set	. 0		0
	A new set of musical ditto, containing the gamut	1	.10	0
	A magic picture for giving shocks	U	7	6
	An electrical cannon, to be discharged by hydrogen gas	U	16	0
	Brass pistols for ditto		7	6
	Spiral tubes to illuminate by the spark, from Os. to	1	10	-
	Luminous names, or words, from 10s. 0d. to		11	
,	Diamond Spotted jars, from 6s. to	0	10	6
	A double jar for explaining the Franklinian theory	U	18	0
	Copper plates and stands for dancing images An electrical tin fire house	0		0
	An electrical tin fire house	. 0	12	0
	An electrical shooter and mark	V	5	
	A mahogany stand for eggs	28 S 70 FF	5	0
	A small head with hair	. C	1	6

	•		,
The body of the second second and the second	£.	s. 1	6
and the control of th		24.00	1000000
An electrical swan		2	
An electrical star			0
Balls of wood, bone, &c. each from 6d. to	O	2	
in a case	0	10	6
A curious collection of working models, to be set in motion by the electrical fluid, consisting of a corn mill and a three- barrelled water pump, worked by one crank only; an or- rery, shewing the diurnal motion of the earth, age, and phases of the moon, &c. an astronomical clock, shewing the aspects of the sun and moon, age, phases, &c all deli- cately made of card-paper, cork, and wire only, packed in	をおけれる		
a deal case	3	3	0
Kinnersley's electrical air thermometer		1	
Cavallo's atmospherical electrometer		10	
Ditto, as improved by Saussure		1	0
Bennet's gold-leaf electrometer	1000	18	0
Ditto with condenser		8	0
The new discharging electrometer, by which the forces are			
denoted by grain weights		18	0
The Medical Apparatus for machines, consists of		3420	
Jars with electrometers, from 12s. to	1	1	0
A new medical ditto, for communicating shocks in the	-	0	0
most convenient and qualified manner		8	
A pair of directors, glass handles, wood points, &c	0	8	17 14
An electrometer to apply to the conductor	0		6
A brass ball and wire for taking sparks, 4s. 6d. to		6	
Electrical insulated stools and chairs, from 9s. to	5		6
A glass for the eye	0	2	-
A variety of other apparatus too numerous to be inserted		1000	
which, as well as the machines, are mounted after the most and eligible methods, so as to render them in action both and permanent.	ap	pro	ved
For a description of electrical apparatus, see the late Mr. G. Adams' Ess tricity, by W. Jones, 8vo. six plates; new edition, price 10s. in book Volta's new Galvanic pile of zinc, and silver, or copper, &c.	ay (on E	lec-
plates, that produces spontaneous and repeated electricity,	-	198	A
decomposes water, fuses wire, &c. from 11. 18s. to	10320	16	
Zinc plates for ditto, sold separately, per 100	O	15	G
Ditto, of zinc & copper square plates in mahogany troughs,	0		Ago
to form the Voltaic or Galvanic Battery, of 50, 2-inch plates	2		THE RESERVE
Do. 3-inch plates	3		
Do. 4-inch plates for deflagration, &c		14	
Do. new improved sort, with ten double suspended plates Batteries of five, six, seven, &c. inch plates to order	2	8	0
De Luc's new Electric Column, exhibiting, by a ball, a per-			
petual motion, 4l. 4s. to	7	7	0
An electrophorus, complete, from 10s. 6d. to	3	3	0
The electric multiplier or doubler	, 2	2	0
Conductors for preservation of ships, houses, &c. from 31.3s. to A new perpetual inflammable air lamp, lighted by the	0 5	5	0
electrophorus, a curious and useful apparatus	4	14	6

			1
1		. 5.	100 m
BAROMETERS, plain mounted, from 11. 18s. to	3	0	0
Barometers, thermometers, and hygrometers, all in one		3190	
neat mahogany frame, from 4l. 14s. 6d. to	6	16	6
A new stick barometer, for ascertaining the heights of			
mountains, depths of valleys, &c. 41. 4s. to	5	5	0
Ditto, with folding portable staves, gimbals, &c	7	7	0
Marine Barometers on springs, for floor or partition		7	0
Hook's wheel Barometer, less correct than the above common	1954	19 119	
form, from 31. 3s. to	6	6	0
Thermometers for all the various purposes, from 9s. to	3		0
Six's new thermometer, for shewing the extremes of heat and	J		U
sold in the absence of the observer from 17 115 6d to	2	12	6
cold in the absence of the observer, from 11. 11s. 6d. to		13	
Chemical jointed scale Thermometers to 600 degrees		1	0
An hygrometer, shewing the moisture and dryness of the air	2.54	10	6
De Luc's whalebone hygrometer		12	6
A rain gauge, with float and tin vessel	1	4	0
Wind gauges of the constructions of Dr. Lind, &c	0	18	0
SIKE's government hydrometers for discovering the strength		47.5	
and proportion of compounds in spirituous liquors,	4	4	0
Glass bubbles for trying spirits	0	10	6
Hydrometers on the best principle, for brewing	5	5	0
An hydrometer for the specific gravities of solids and fluids,	3	13	6
An apparatus for hydrostatical experiments, 3l. 13s. 6d. to .		0	0
A Glass model of a diving bell	1	4	0
Hydrostatic balances, from 2l. 12s. 6d. to	0	A Section 1	0
A new and very accurate do. the conical beam of brass	9	9	
12l. 12s. to	52	10	0
Artificial magnets, in bars and sets of bars, from 2s. 6d. to			0
Ditto in shape of a horse-shoe, the strongest form, 1s. 6d. to			
			0
Ditto, combined to any number, from 12s. to	21	0	0
Box of magnetical apparatus, illustrating a variety of curious			150
and entertaining properties in magnetism, containing			1
the following articles; a set of six bar magnets; two horse-			
shoe magnets; six iron balls; a magnetometer; two spin-			
ners; a dipping needle; a gimbal compass; two brass tables;			
an armed combined magnet; six needles, and stands; and			
sundry other articles packed in a case, 51, 5s. to	7	7	0
Dipping magnetic needles, 11. 1s. to	5	7 5	0
Variation Compasses 11. 1s. to	10	10	
MAGNETICAL RECREATIONS. The sensitive fishes, that			
swim towards a piece of bread placed at the end of a stick,			
and when the other end is presented, retreat	0	6	6.
Comus' two boxes of numbers, one of which being secretly			
arranged, is discovered by placing the other over it	2	2	0
Pyrometers, shewing the expansion of metals, from 31. 3s. to	2 8	2 8	0
The mechanical powers, for illustrating and demonstrating	0		V
the laws of motion, gravity, &c. a set neatly made in			
brass consisting of the balance the pullice different			
brass, consisting of the balance, the pullies, different	4 6	19-02	
kinds of levers, the inclined plane, the wheel and axle,			
the screw, a compound engine, a compound lever, a		類的以	
double cone to move up an inclined plane, friction wheels,	100	215	
weights, wedges, &c. complete			0
gener marchetick sirring, nehically the	ST.	WIZE	
orney a currous and metril apparatus 4-14 G	BEZAT		

마일 (프로그리) [1845년 1812년 1912년 -	L.	S.	d.
The same occasionally made on a more elegant and enlarged	~	100	400
plan, for a large auditory, 40l. to	60	0	0
Ditto, with many parts of the apparatus made of mahogany,	Marine.	Ma	
and the whole set packed in a box 181. 18s. to	20	5	0
Separate sets of pullies, variously constructed and combined.		246	
A small brass carriage with inclined plane, and wheels of dif- ferent sizes, &c. experimentally proving the friction, re-			A
sistance, &c. of all sorts of wheel-carriages	9	9	0
Ferguson's compound engine, in which all the simple mecha-			
nical powers work together	4	14	6
A whirling table, for explaining and demonstrating the laws		105	
of the planetary motions, the demonstrations of the doc-	ALE .		
trine of the tides, and other properties of gravity and cen- trifugal forces,	26	5	0
Atwood's elegant and accurate apparatus, for demonstrating			1
the laws of accelerated and retarded motion, and other in-	0.7		
teresting laws in mechanics	25	4	0
Several small manogany models for explaining the centre of gravity, the line of direction, &c	2	2	0
A small working model of a steam-engine all in brass	23	2	0
A large do being a complete copy of Boulton & Watts most	ns		
improved engine with the boiler and apparatus complete	100	-	0
841. to 11. f ill lining Engines Croppes &c. 2/2s to	6	6	0
Working models of pile driving Engines, Cranes, &c. 3'.3s.to	0	150	
the second company of the second seco			
The state of the s			
PHILOSOPHICAL CHEMISTRY.			
PHILOSOPHICAL CHEMISTRY.		e s.	
Glass cas bottles, with bent necks, each from 4s. 6d. to	() 7	7 6
Glass gas bottles, with bent necks, each from 4s. 6d. to	() (6 6
Glass gas bottles, with bent necks, each from 4s. 6d. to	() 19	6 6 6 0 2 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(() 19	7 6 6 6 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	() 19	7 6 6 6 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	((((re-) 7) (0) 19) 10	7 6 6 0 2 0 5 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	((((re-) 7) (0) 19) 10	7 6 6 0 2 0 5 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.) 7) (0) 19) 10	7 6 6 0 2 0 5 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.) 7) (0) 19) 10	7 6 6 0 2 0 5 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.) 7) (0) 19) 10	7 6 6 0 2 0 5 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.) 7) (0) 19) 10	7 6 6 0 2 0 5 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	mic ing ing ing stle kc. es;	4 4	0
Glass gas bottles, with bent necks, each from 4s. 6d. to	mic ing ap- stle kc. es;	4 12	7 6 6 0 2 0 6 0 6 0 6 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.	4 4	7 6 6 0 2 0 6 0 6 0 6 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	((4 12 8 3	0 0 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	((4 12 8 3	0 0 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.	4 12 8 3 10	0 0 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.	4 12 8 3 10	0 0 0
Glass gas bottles, with bent necks, each from 4s. 6d. to	(.	4 J2 8 3 10 7	0 0 0 0 0 0

	2	5.	1
Do. all made of brass, pillar jointed, &c			
Do. all made of brass, pillar jointed, &c	~	4	U
An apparatus consisting of two connected brass stopcocks with			
bladders, glass receivers with stopcock, a plain brass jet, revolv-			
ing do, soap-bubble pipe,&c. an useful and entertaining appara-			
tus for containing and compounding oxygen and hydrogen gases			
for detonation, ignition, &c. or the philosophical fireworks, &c.			
A brass blowpipe with caps for fluxing minerals, &c. from 7s. 6d.	0	12	0
Do. with platina spoon, megalascope, fluxes, and sundry small		10	
apparatus, packed in a fish skin case, forming a complete			
pocket mineralogical laboratory	2	18	0
The new blow-pipe apparatus, and brass syringe for fusing by			
condensed air; or intensely so by oxygen and hydrogen gases	3	10	0
Magellan's portable table lamp furnace, with the blowpipe, its			
brass supports and appendages, small glass retorts and vessels,			
&c.&c. for minute chemical and mineralogical experiments	5	5	0
A double constant blast bellows to apply to the blowpipe of do.			
A self acting spirit blowpipe with jets	2	2	U
An universal and portable iron table charcoal furnace for reduc-			
tions of ores and metals, distillations, decomposition of bodies,	1		
&c.&c	5	15	0
An iron retort and pipe for oxygen gas from manganese, with	1		
brass jointed conducting tubes	1	11	
Leaden retorts, receiver & bottles for the fluoric acid from 5s. to			
A new apparatus of lead for etching on glass by the fluoric acid		12	6
A mineralogical goniometer to measure the angles of chrystals	1	4	0
A small box of geometrical solids, cut in wood or glass, for repre-	N.		
senting the forms and varieties of crystals 11. 5s. to	3	,3	0
Of Platina Small retorts, crucibles, dishes, spoons, forceps, thin			
rolled foil, wire, &c. per oz. Il. Is. to		15	0
An hydrogen gas machine for producing instantaneous light		14	6
Lavoisier's elegant apparatus improved for exhibiting the for-			
mation of water by the slow combustion of hydrogen gasin an at-		349	
mosphere of oxygen	7	17	G
A mahogany chest containing 42 stopped glass phials, of various		1100	
tests, re-agents, fluxes, precipitants, &c. &c. for the examination			
of minerals, analysis of water, and other chemical experiments	4	14	6
Do. with 56 or more phials, and extended apparatus at the desire			
of the purchaser 6l. 6s. to	15	15	0
A portable chest of 28 phials, containing chemical preparations for	10	10	
performing a variety of entertaining & instructing experiments			
with sympathetic inks, dyes, phosphoric, &c. exhibitions, with	0	10	c
book of directions		13	0
With all other general and specific articles, and apparatus descri-			
bed by the best writers; whose treatises may also be had.			
For prices of galvanic batteries, and hydrostatical balances, see page	•		
11 and 12 of this Catalogue.			
Select and suitable extended lists of articles made out for the			
purposes of private or public lectures.			
Besides the preceding, a great variety of other articles too nur	nei	rons	to
be included in this catalogue, as well as any instrumental arti			
from particular drawings, or as described by the different writ			

Besides the preceding, a great variety of other articles too numerous to be included in this catalogue, as well as any instrumental article made from particular drawings, or as described by the different writers upon mathematics, philosophy, philosophical chemistry, &c. And students of the sciences furnished with the most approved elementary treatises.

Merchants, shopkeepers, schoolmasters, andothers that sell again,

are supplied with the best articles, and with good allowance.

Letters from the country or abroad, containing orders or previous enquiries, explicitly and punctually attended to.

BOOKS PUBLISHED BY W. JONES.

	1	5.	16
A Description and Use of the New Portable Orrery, to which is prefixed a short account of the solar system, including a concise description of the recent discoveries by Dr. Herschel,	20.		
A Description and Use of the Hadley's Quadrant, with an account of all the new apparatus added to it, for taking observations accurately, in order to determine the longi-	0	3	0
tude at sea; illustrated by copper-plate figures, 2d edit. Methods of finding a Meridian Line, to set sun-dials, regu-	0	1	6
late clocks, watches, &c	0	1	0
Directions for finding a Meridian Line, on a card	0	0	6
A concise Explanation of the Barometer, Thermometer, and Hygrometer, with rules for predicting changes in the wea-	o de		
ther, in a small book 6d. on a pasteboard varnished	0	1	0
Cowley's Illustration of Solid Geometry, containing 42 cop- per-plates of moveable figures; a work very useful and			
convenient for teachers and young students in geometry, as the figures, when folded up, form exactly the solid figures of the Platonic bodies, conic sections, and several			
portions of Euclid's Elements, &c. &c. boards	1	4	6
portions of Edend's Elements, &c. &c. boards			
OTHER BOOKS SOLD BY W. AND S. JONES.			
Hutton's (Dr.) Mathematical Dictionary, 2d. edit. 2 vols. bds.	5	15	6
Mendoza's Astronomical Tables, &c. 4to. boards	2	6	0
The Philosophical Transactions of the Royal Society, con- taining 11 vols. of the Abridgment; and from thence, the Continuation at large to the present time; the Index, with Birch's and Sprat's History, 5 vols. all in uniform			
clean calf gilt binding in 80 vols. 4to	78	0	0
Vince's Treatise on Astronomy, in 3 vols. 4to. bds. new edit. Bode's large Imperial Celestial Atlas, with folio book of			0
astronomical tables and directions	8	8	0
OCTAVO.		error	,
meather tilling type, gelloronic, and the property			
Keith's Introduction to Plane & Spherical Trigonometry, bds. Mackay's Theory and Practice of the Longitude, 2 vols.	0	12	0
boards, new edition		12	6
Complete Navigator	Mark Toward	12	0
Cavallo's Treatise on Magnetism, with Supplement, 3d edit. Mountaine's description, &c. of Robertson's improved 3 feet	4 4 3 2	8	0
Sliding Gunter's scale		12	0
Moore's Practical Navigator, or Seaman's Daily Assistant.	0	12	0
Nautical Almanacks, a complete set bound, 35 vols Ditto for any year to 1820	7	6	0
Requisite Tables to the above, unbound, with appendix	0	7	0
Robertson's Elements of Navigation, new edit. 2 vols			
Wale's Method of finding the Longitude by Time-keepers, and Description of a portable Transit Instrument, &c			6
The second secon			

BY THE LATE G. ADAMS, NOW SOLD BY W. AND S. JONES.

- description of the most improved Microscops; a general History of Insects, their Transformations, peculiar Habits, and Economy; an Account of the various Species and singular Properties of the Hydræ and Vorticellæ; a Description of 379 Animalcula; a View of the Organization of Timber, and the Configurations of Salts when under the Microscope, &c. &c. Second Edition, with considerable Corrections, Augmentations, and Improvements, and occasional Notes; together with Instructions for Procuring and Collecting Insects, and a new copious List of the most curious and interesting Microscopic Objects; by Frederic Kanmacher, F. L. S. In one large Volume 4to, and illustrated by thirty-three folio Plates. Price 11. 16s. in boards.
- GEOMETRICAL AND GRAPHICAL ESSAYS. Work contains, 1. A select Set of Geometrical Problems, many of which are new, and not contained in any other Work. 2. The Description and Use of those Mathematical Instruments that are usually put into a Case of Drawing Instruments. Besides these, there are also described several new and useful instruments for Geometrical Purposes. 3. A complete and concise System of Surveying, with an Account of some very essential Improvements in that useful Art. To which is added, a Description of the most improved Theodolites, Plane Tables, and other Instruments used in Surveying; and most accurate Methods of adjusting them. 4. The Methods of Levelling, for the purpose of conveying Water from one place to another; with a Description of the most improved Spirit Levels. 5. A Course of Practical Military Geometry, as taught at the Royal Academy, Woolwich. 6. A short Essay on Perspective. The Fourth Edition, corrected and enlarged, with the Description of several Instruments, &c. unnoticed in the former Edition, by W. Jones, F. Am. P.S.; illustrated by 35 Copper-plates, in 2 Vols. 8vo. Price 16s. in boards.
- III. AN APPENDIX TO THE GEOMETRICAL AND GRA-PHICAL ESSAYS, containing the following Table by Mr. John Gale, viz. a Table of the Northings, Southings, Eastings, and Westings, to every Degree and Fifteenth Minute of the Quadrant, Radius from 1 to 100, with all the intermediate numbers, computed to three Places of Decimals. Price 2s. 6d.
- IV. ASTRONOMICAL AND GEOGRAPHICAL ESSAYS, containing, 1. A full and comprehensive View, on a new Plan, of the general Principles of Astronomy, with a full Account of the Discoveries of Dr. Herschel. 2. The Use of the coelestial and Terrestrial Globes, exemplified in a greater Variety of Problems than are to be found in any other Work; they are arranged under distinct Heads, and interspersed with much curious but relative Information.

 3. The Description and Use of Orreries, Planetariums, &c. 4. An Introduction to Practical Astronomy, by a Set of easy and entertaining Problems. Sixth Edition, corrected by W. Jones 8vo. Price 12s. in boards illustrated with sixteen Plates.

An introduction to practical Astronomy with the use of the quadrant and equatorial, selected from the above. Price 2s. 6d.