ANNALS OF PHILOSOPHY;

OR, MAGAZINE OF

CHEMISTRY, MINERALOGY, MECHANICS,

NATURAL HISTORY,

AGRICULTURE, AND THE ARTS.

BY THOMAS THOMSON, M.D. F.R.S. L. & E. F.L.S. &c.

MEMBER OF THE GEOLOGICAL SOCIETY, OF THE WERNERIAN SOCIETY, AND OF THE IMPERIAL MEDICO-CHIRURGICAL ACADEMY OF PETERSBURGH.

VOL. I.

JANUARY TO JUNE, 1813.

London:

Printed by C. Baldwin, New Bridge-street;

FOR ROBERT BALDWIN, PATERNOSTER-ROW.

SOLD ALSO BY W. BLACKWOOD, EDINBURGH; AND J. CUMMING, DUBLIN.

Exposition of Facts concerning the Effects of Vaccination, and	
Examination of the Objections to its Practice. By M. M.	
	135
Correction of an Error in the Account of Mr. Cavendish	143
Chemical Remarks on Gold	144
	145
	146
	147
	148
	149
PROCEEDINGS OF THE FRENCH INSTITUTE.	CTI
1. Memoir on the Attraction of Homogeneous Spheroids. By	
M Legendre	150
M. Legendre	150
2. On the Distribution of Electricity on the Surface of Con-	
ductors. By M. Poisson	152
	156
New Patentsil	oid.
Scientific Books in hand	158
Meteorological Table, &c. Nov. 25 to Dec. 24, 1812	159
Allegan Legens and Spirit Legens and Legens	
NUMBER III MARCH	
NUMBER III.—MARCH.	
Biographical Account of Mr. Karston	
Biographical Account of Mr. Karsten	161
On the Liquid Gum from Botany Bay	63
Description of an Organ by which the Eyes of Birds are accom-	nich.
modated to Distances. By Mr. Crampton	70
Population of the Principal Towns of Great Britain	74
On the Specific Gravity of the Gases.	77
Description of new Hydraulic Machines. By M. Mannoury	
Declot	83
On Formations. By Professor Jameson	91
Analysis of the Philosophical Transactions for 1819 Part II o	06
Professor Blumenbach on Vegetables found in some Species of	
Wilherals	17
Dr. Langsdori on Infanois	2.1
it. Ottingen on Chromium in Chlorite	: 1
141. Odditell on some Italian nocks	
of Glescke, the Mineral Dealer	ide
Thumberg our Sarcocol.	4 63
Of the Marine Transit ibi	18
	19
Fall of Rain in Scotland in 1812ibi	20
Mr. Huton's Method of freezing Alad 1	id.
Mr. Hutton's Method of freezing Alcohol.	21
Proceedings of the Royal Society, Jan. 28, Feb. 4, 11, and 18. ibi	id.
	24
French Institute.	
E OCOUNG De ce 4 MA Di Til	
1. Researches of M. Biot on Light 2. New Phænomena of Optics. By Arago	25

TABLE OF CONTENTS.	vii
	235
	237
	ibid.
Meteorological Table, &c. Dec. 25 to Jan. 22, 1813	239
Jan. 23 to Feb. 21*	241
- oluly legislatically in regarding a year with inner no to see the	
ADDIT	
NUMBER IV.—APRIL.	
Observations in answer to Mr. Chenevix's Attack on Werner's	
25' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	241
Account of Mr Ramsay's Cast-Iron Boller for evaporating	
Soap Levs	258
Soap Leys Present State of Agriculture in Berwickshire. By the Rev. J.	260
[77]	265
Meteorological Tables for 1812 at Sidmouth, &c	200
Extent of the Counties of Scotland. By Mr. Jardine and Sir George S. Mackenzie	269
Continuation of the Report, by the French Institute, on Vacci-	Joseph .
nation	271
Analysis of Graphite. By Schrader	294
Astronomical Observations. By Col. Beautoy	300
New Salts of Lead. By Chevreul	302
New Properties of Light	002
Sulphuric Acid	307
Population of Sunderland	ibid.
Notice respecting the Geognosy of Werner	ibia.
Proceedings of the Royal Society, Feb. 25, March 4, 11, and 18,	308
Linnæan Society, March 2 and 10	310
French Institute. By Laplace	311
 Analytical Theory of Probabilities. By Laplace Carnot, on Fortifications 	313
3. Bossut, Memoires de Mathematique	314
4. New Mathematical Works	ibid.
New Patents	316
Scientific Works in hand	318
Meteorological Table, Feb. 22 to March 24, 1813	-319
public of Azare, ibid.	
The second secon	
NUMBER V.—MAY.	
	001
Biographical Account of M. de Fourcroy	321
Analysis of the Cerebral Matter of Man and other Animals. By Vauquelin	332
Population of France in 1812	347
On Mineralogical Veins	356
6	

INDEX.

A.

CIDS, freezing points of, ascertained by Cavendish, p. 11 Acidum muriatico-sulphuroso-carbonicum, 473. Acrid principle, 395.

Æningen, local formation at, 194.

Agate, plant in, 217.

Agriculture of Berwickshire, 260. Air, atmospheric, analysed by Cavendish, 11.

-, yielded by fermentation and putrefaction, 9.

, phlogistication of, examined by Cavendish, 12.

Alcohol, freezing of, 221.

_____, in wines, 74. , of sulphur, account of, 383, 393, 470.

Allan, Thomas, Esq. on minerals from Greenland, 99-on the transition rocks of Werner, 414.

Allanite, 108.

Alopecurus pratensis, 65.

Alumina, test of, 67. -, pure, 467.

Ammonia, singular decomposition of, 392.

Amphibole, 105.

Anderson, Mr. on two plants, 148on a new species of rubus, 385.

Animal heat, on the origin of, 211. Annesleyana, 224.

Antimonane, account of, 60.

Apatite, 102. Arrago, M. memoirs of, on optics,

Arragonite, new analysis of, 384.

Arsenic, experiments on, 75.

-, its action on animals, 63.

Arsenicane, account of, 60.

Astragalus campestris, discovered in Scotland, 225.

Astronomical observations, 300, 370, 458.

Atmometer, 467.

Atomic theory, some observations on, 472.

Augite, 106.

VOL. I.

Austin, Mr. on an apparatus for condensing gas, 309.

Azote, composition of, 466.

-, singular compound of with chlorine, 63.

B.

Balena mysticetus, account of, 51. -, organs of hearing

in, 56.

Bayle, experiments of, on vomiting, 430,

Beaufoy, Col. astronomical and magnetic observations by, 300, 370,

Berard on the specific heat of gases,

Bergman's analysis of sea water, 39. Berwickshire, agriculture of, 260. Berzelius and Marcet on alcohol of

sulphur, 383, 470.

Biot, researches of, on light, 225. Birds, on the organs of digestion of,

Bismuthane, account of, 60.

Bitter spar, primitive crystal of, 57. Blagden, Sir Charles, on short-sightedness, 222.

Blumenbach, Professor, observes plants in stones, 217.

Bossut, memoirs of, 314.

Bostock, Dr. on galvanic electricity,

Botany Bay, account of, 43, 120. Brande, Mr. on the alcohol in wines,

Brewster, Dr. on new properties of light, 221, 302.

Britain, population of, 40. British mariners guide, 404.

Brodie, B. C. Esq. his experiments and observations on the action of poisons on the animal system, 61experiments on the influence of the brain in animal heat, 211.

Brooks, Mr. on new shells, 224. Brown, Mr. on naked seeds, 310. Brownea, species of, described, 149. Burckhart's tables of the moon, 238.

ARTICLE IX.

SCIENTIFIC INTELLIGENCE; AND NOTICES OF SUBJECTS
CONNECTED WITH SCIENCE.

I. Vegetables found in some species of Minerals.

Professor Blumenbach, of Gottingen, in a letter to Von Moll, says, that though he had hitherto disbelieved the occurrence of vegetable bodies in the dendritic variety of chalcedony named mocha stone, he must now admit that it does sometimes contain true vegetables, apparently of the nature of conferva. He observed these in specimens from Iceland and Catherinenburg. The same celebrated zoologist received from Dr. Lichtenstein, the traveller, a very remarkable agate, which was worn as a precious amulet by a Japanese prince. On examining it, he discovered in its interior the fructification of an unknown plant, somewhat resembling the sparganium erectum.

II. Turquois.

Dr. Langsdorf, who accompanied Captain Krusenstern in his voyage round the world, presented to Blumenbach an uncut turquois, from Nischabar, in Eastern Persia. From the specimen it appears certain that this substance is not a petrifaction, but a particular mineral species which occurs in nests in beds of clay. According to the analysis of Dr. John it appears to be nearly allied to mollite (siderite).

III. Chromium in Chlorite.

Mr. Bergweser Uttinger, of Sontkofen, has discovered from 1 to $1\frac{1}{2}$ per cent. of chromium in a green coloured mineral heretofore considered as chlorite, and which gives a green colour to some kinds of sandstone. This mineral occurs in masses, from the size of an inch to that of a pea, in grey shell limestone and grey sandy marl. It occurs also disseminated in compact and lenticular clay iron stone. It thus appears that chromium is far from being circumscribed in its distribution.

IV. Italian Rocks.

Mr. Giuseppe Gautieri, principal inspector of forests in the kingdom of Italy, has lately examined the interesting valleys of Fiemme, Fassa, and Livinalunga, and finds the rocks to belong to the floetz trap formation, and to resemble in every respect the trap hills near Verona, Vicenza, and Padua, which have been described by many mineralogists as volcanic.

V. Gieséke, the Mineral Dealer.

This Gentleman was mentioned in a paper on Greenland