## CONTENTS.

OBTOTALL COMPRINCATIONS	
ORIGINAL CONTRIBUTIONS.	PAGE
Note Explanatory on the Copyright of Railway Plans. By John Herapath, Esq Answer to the Strictures on Mr. Herapath's Article on the Greenwich Railway. By Anti-H. Description of an Expeditious Razor-Sharpener. By D. Pring, Esq., M.D	6 ib.
Ephemeris of Halley's Comet. By J. W. Woollgar, Esq	8 9
On Training the Vine. By Mr. J. Hayward	ib.
Electrical Theory of the Universe. By Mr. T. S. Mackintosh Art. I	227
Art. II	292
	419
On an Alleged Infringement of Mr. Hicks's Patent Gas-cooking Apparatus. By Mr. J. T. Beale, Engineer.	13
Remarks on Mr. Herapath's Principles of Railway Locomotion. By Iver Jaciver. 15, 123, 195, 219, 250, 275, 323, 394, 433,	
Description of Pendulum Lights for Ships' Guns. By Lieut. Wall, R.N	18
On the English of the Patent Law Amendment Act	19
On Railways. By John Herapath, Esq. The Greenwich Railway Eastern Counties Railway	51
On Fire-proof Buildings. By Mr. Christopher Davy, Architect 22	
On the Improved Metropolitan Street-Paving. By C. B	23
Description of a Two-Way Steam-Cock, which answers all the Purposes of the com- mon Four-Way Cock. By Mr. W. Buckland	24
On Water as a Prime Mover. By Mr. W. Baddeley	25
Autobiographical Passages in the Life of Mr. Nash. By W. A. R	26
Illustrations of the Phenomena of Halley's Comet. By J. W. Woollgar, Esq  Description of a simple Mariner's Log. By Mr. G. S. Holland	29 30
On the Working and Authorship of the Letters Patent Amendment Act	31
Description of, and Reports of Performances of, Hunter's Stone-Planing Machine	34
Description of Dr. Williams's Self-inflating Life-Buoy Description of Sowerby's Patent Improvements for Securing Ships' Windlasses. By the	40
Patentee	41
Notes of a Traveller, on American Steam Navigation	47
Mechanical Analysis of the Buckingham Ploughing Match. By Mr. William Andrews,	
Land-Surveyor	54
Observations on the Practicability of Guiding and Directing Air-Balloons, or Aerial Ships. By Mr. T. S. Mackintosh	55
Opinions of Sir Frederick Pollock and John Steer, Esq., on the Letters Patent Law	10.5
Amendment Act	61
On Mr. Rosser's Misrepresentations with respect to the Working of the Patent Law Amendment Act	63
Corrections of some Errors in Dr. Lardner's Evidence before the House of Lords on the Great Western Railway Bill. By Dr. Lardner	67
Reply to Iver M'Iver's Strictures on Mr. Herapath's Railway Theorems. By Anti-Carper	
Memoir on the Thames Tunnel. By ‡	68
Description of a Method of Freeing a Vessel from Water by her Heeling. By \( \phi \)  Description of a Water Gas-valve. By Mr. Peter Horsman, Secretary, Shrewsbury	72
Mechanics' Institution	73
On the Improved Metropolitan Street-paving. By. Q	74
Claim of the Invention of the Improved Paving. By Mr. John Watson, Superintendent of Ramsgate Harbour Works	ib.
Reply to Mr. Beale on the alleged Infringement of Hicks's Patent for Gas-cooking. By Mr. T. G. Barlow	80
On the Ship-sinking System; with copy of Correspondence between the Secretary of	
Lloyd's and Captain Ballingall. By Captain James Ballingall	83 86
Notice of Mr. R. N. Fox's Chart of the Inclination of the Dipping Needle  Description of Young's increased purchase for Ships' Windlasses. By Mr. T. Sowerby	
On Railway Platforms, and Description of a New Slate Platform. By Joseph Jopling,	
On the probable Conneyion between Floatricity and Vagatation Pr Mr T Pine	98 99
On the probable Connexion between Electricity and Vegetation. By Mr. T. Pine On Rotary Steam-engines, and Avery's in particular	
On the Ship-sinking System. By Captain James Ballingall	105
Description of an Effectual Cure for Smoky Chimney. By Mr. L. Mundy	121