

**A GENERAL AND ELEMENTARY
VIEW OF THE UNDULATORY
THEORY, AS APPLIED TO THE
DISPERSION OF LIGHT, AND
SOME OTHER SUBJECTS**

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A General and Elementary View of the Undulatory Theory, as Applied to the Dispersion of Light, and Some Other Subjects by Baden Powell

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BADEN POWELL

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A GENERAL AND ELEMENTARY VIEW
OF THE
UNDULATORY THEORY,
AS APPLIED TO THE
DISPERSION OF LIGHT,
AND
SOME OTHER SUBJECTS.

INCLUDING THE SUBSTANCE OF SEVERAL PAPERS, PRINTED
IN THE PHILOSOPHICAL TRANSACTIONS, AND
OTHER JOURNALS.

BY THE REV.
BADEN POWELL, M.A., F.R.S., F.G.S., F.R.A.S.
SAVILIAN PROFESSOR OF GEOMETRY IN THE UNIVERSITY
OF OXFORD



*Omnia enim Philosophia difficultas in eo versari videtur, ut, a phenomenis
MOTUM, investigemus vires naturæ, deinde ab his viribus, demonstremus
phenomena reliqua.—NEWTON, Princip. præf. 1.*

LONDON:
JOHN W. PARKER, WEST STRAND.
M.DCCC.XLI.

1013.

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CAMBRIDGE.

TO
THE MOST NOBLE
THE MARQUIS OF NORTHAMPTON,
F.G.S., F.A.S., &c.
PRESIDENT OF THE ROYAL SOCIETY.

MY LORD,

IN acknowledging your Lordship's kindness in allowing me to testify my respect by inscribing this volume to you, I am anxious to refer to the circumstances under which I made the request.

My former researches on the Dispersion of Light have successively appeared in the PHILOSOPHICAL TRANSACTIONS; and it would certainly have been most desirable that the series should be continued through the same channel. But the nature of the discussion into which I have been led, with the view of bringing the sub-

ject into a more complete shape, has been such as to render a separate publication more advisable.

By your Lordship's kindness, however, I may still consider myself as presenting these researches to the ROYAL SOCIETY, under the gratifying form of a dedication to its distinguished HEAD.

I have the honour to remain,

Your Lordship's

Most obedient and obliged Servant,

THE AUTHOR.

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ERRATA.

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xxix	16	that	that the
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45	16	totle diriguée dum	totale dirigée dans
56	8	$\sin^2 \theta \frac{d\xi}{dx}$	$\sin 2\theta \frac{d\xi}{dx}$
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109	1	chromate of lead	solution of chromate of lead
...	...	potass	solution of potass
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131	16	ξ^2	ξ^2

34 Art. 124, add the following note:—

On this point see also the note appended to Sir J. Lubbock's paper; p. 263, *Journal of Science*, Vol. xv. Nov. 1839.