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978-1-108-06202-2 - A Chemical and Medical Report of the Properties of the Mineral Waters: Of Buxton, Matlock, Tunbridge Wells, Harrogate, Bath, Cheltenham, Leamington, Malvern, and the Isle of Wight

Charles Scudamore

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It is sobering to realise that as recently as the year in which *On the Origin of Species* was published, learned opinion was that diseases such as typhus and cholera were spread by a 'miasma', and suggestions that doctors should wash their hands before examining patients were greeted with mockery by the profession. The Cambridge Library Collection reissues milestone publications in the history of Western medicine as well as studies of other medical traditions. Its coverage ranges from Galen on anatomical procedures to Florence Nightingale's common-sense advice to nurses, and includes early research into genetics and mental health, colonial reports on tropical diseases, documents on public health and military medicine, and publications on spa culture and medicinal plants.

### A Chemical and Medical Report of the Properties of the Mineral Waters

In medical terms, 'mineral water' was, in the early nineteenth century, any water that appeared to have an effect on human health. British physicians often prescribed mineral waters from particular locations – most commonly those at Bath – for a variety of illnesses. However, there was little available information on the chemical composition of these waters, and extant manuals were often inaccurate. This report by the physician Charles Scudamore (1779–1849) appeared in 1820, the first of its kind for decades. Having visited several well-known spas and wells, including Bath, Buxton and Cheltenham, Scudamore conducted a series of experiments on water samples: he reports using litmus, turmeric and violet papers to judge alkalinity levels; documents testing for various minerals using anything from soap to silver; and explains in detail the difference between hard and soft water. His report remains insightful reading in the history of medicine.

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HARROGATE,  
BATH,

CHELTENHAM,  
LEAMINGTON,  
MALVERN,  
AND THE  
ISLE OF WIGHT.

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By CHARLES SCUDAMORE, M.D.

*Member of the Royal College of Physicians,  
Of the Medical and Chirurgical Society of London, &c. &c.*

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TO  
HIS GRACE  
**THE DUKE OF DEVONSHIRE.**

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*MY LORD,*

*As, in the extensive series which this volume includes, the waters of Buxton first engaged my attention, I have placed it at the head of the list.*

*The antiquity of the Buxton springs is indeed of very early date; but so entirely have all the arrangements, made for the comfort and advantage of the invalid of every rank, sprung from your Grace's Family; and so manifestly do they continue to flourish under your patronage and direction; that it is with peculiar satisfaction I embrace the high honour allowed me, of presenting to your Grace the whole of the following Treatise.*

*With this sincere, though inadequate, testimony of respect, I have the honour to remain,*

*MY LORD,*

*Your Grace's most obedient,  
and obliged humble Servant,*

**CHARLES SCUDAMORE.**

*6, Wimpole Street,  
Sept. 30, 1820.*

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## PREFACE.



HAVING the opportunity, in the Autumn of last year, of visiting several of the most remarkable watering places in this country, I became naturally inquisitive into the state of their mineral springs; and upon a slight examination of those which came first within my observation, I found reason to suspect the fidelity of the existing sources of authority respecting them. Books were defective in describing the number of the springs in many places, and more or less erroneous as to the chemical properties of most of the waters. I discovered the error into which I had been led by the confidence which I had placed in authors; and I resolved at least to gain some further instruction for myself. From one step I went on to another, and at length conceived an ardent desire to engage in an extensive inquiry into the subject, and present my results to the Profession and the Public, if they should appear to be sufficiently important in novelty and interest.

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At Buxton, I was joined by Mr. Garden of London, whose skill in operative chemistry is well known. He brought all the necessary requisites for making a complete analysis ; and we afterwards proceeded to Harrogate. In every instance, all the preliminary experiments were made at the springs ; but, except at these places and Tunbridge Wells, the shortness of my stay did not allow me the opportunity of examining the gases in the usual method. In regard, however, to the saline waters of Cheltenham and Leamington, and the more simple waters of Malvern and Matlock, the determination of the exact quantity of their carbonic acid, does not appear to me by any means essential ; and the proportions of sulphuretted hydrogen which some of these waters contain, are, I think, made sufficiently evident for medical purposes. The gaseous properties of the Bath waters are accurately stated by Mr. Phillips ; the analysis of the aluminous chalybeate in the Isle of Wight is very complete from the hands of Dr. Marcet ; and the reprint of my former publication on the water of Tunbridge Wells, embraces all that I could wish to offer respecting it. The greater part of the waters were wholly examined as to their solid contents in London ; with all the care and repetition of experiments, which the importance of the subject demanded.

To those acquainted with the difficult, and

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almost endless details of chemical analysis, the accomplishment of an investigation so extensive will appear to be no trivial labour. Indeed, I could not have engaged in it without some aid. In addition, therefore, to the valuable assistance which I received from Mr. Garden, I feel much satisfaction in acknowledging my great obligations to my friend J. G. Children, Esq. whose kind contributions will frequently appear in this Work.

When the press every day teems with new publications, it is a natural and fair inquiry, on what grounds does an author offer himself to the notice of the public? My inducements on the present occasion, I will further state.

The tepid springs of Buxton had not been examined since the year 1784; the sulphuretted and chalybeate springs of Harrogate, not since the year 1794; and at Harrogate, a new and important spring had recently been discovered. I include also the report of several other new springs, which have never been publicly noticed.

Modern chemistry has afforded improved methods of analysis, and has led, consequently, to new reasonings on the medicinal properties of mineral waters.

I may be allowed, I hope, to add, without impropriety, that I have engaged in this inquiry with a mind wholly free from prejudice;—free also from the smallest partiality to any particular

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place, or to the proprietor of any particular spring. My sole object has been to prepare a volume, which should contain a faithful statement of the chemical and medical qualities of the various waters of which I have treated. An annual excursion to some watering place has become so prevalent a fashion, that it is of importance to every medical practitioner to possess a manual, which shall safely guide his judgment in prescribing this class of remedies. The excellent Treatise, published by the late eminent Dr. Saunders, contained the best report on the subject which chemical analysis at that time of day enabled him to give ; but a sufficient interval has occurred, in conjunction with many changing circumstances, to render that work no longer an authority worthy of reliance.

I trust, therefore, that I have shewn the validity of my pretensions for appearing now in print. On the success with which I have executed the undertaking, the impartial critic must decide.

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