Our temperaments: their study and their teaching, a popular outline / by Alexander Stewart.

Contributors

Stewart, Alexander, F.R.C.S. Royal College of Physicians of Edinburgh

Publication/Creation

London: Crosby Lockwood, 1887.

Persistent URL

https://wellcomecollection.org/works/n9fwgzfr

Provider

Royal College of Physicians Edinburgh

License and attribution

This material has been provided by This material has been provided by the Royal College of Physicians of Edinburgh. The original may be consulted at the Royal College of Physicians of Edinburgh. where the originals may be consulted.

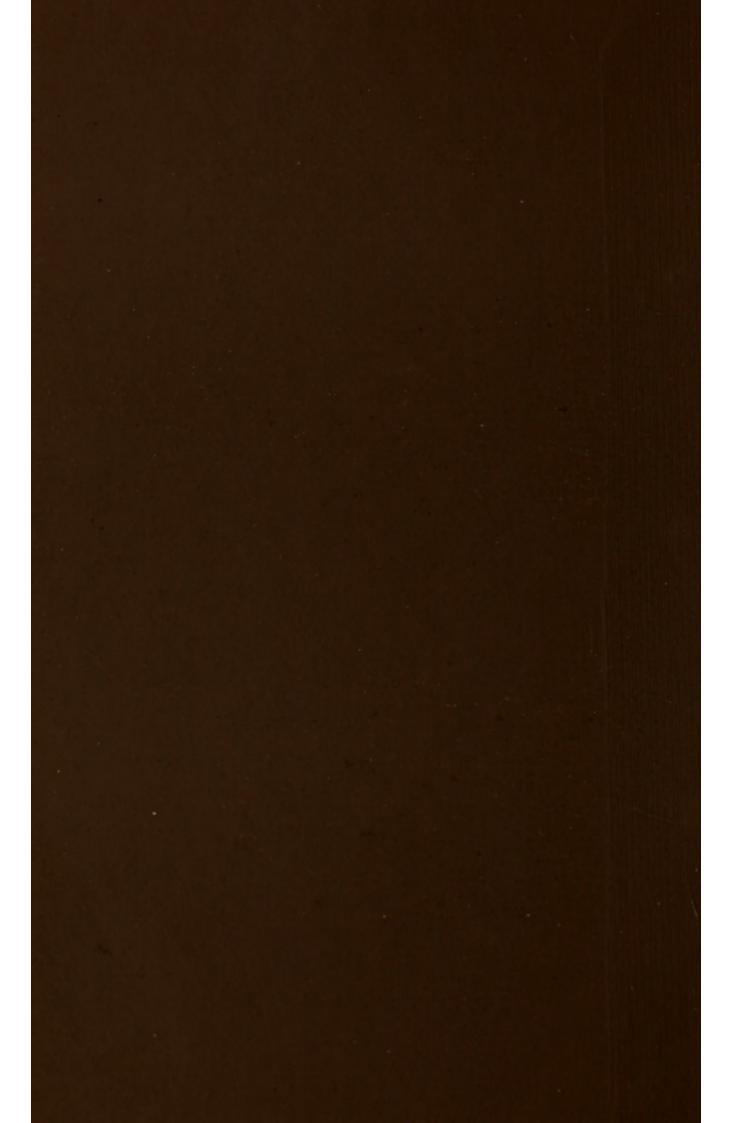
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

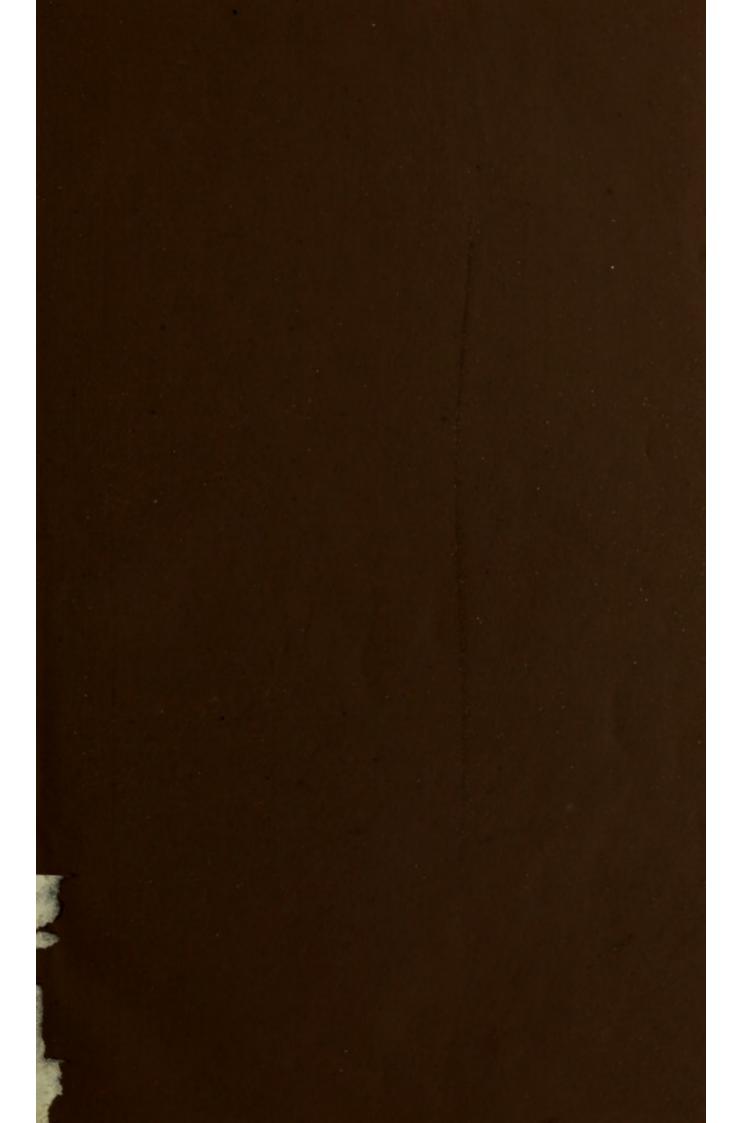
You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org

OUR TEMPERAMENTS





×. 468.9

OUR TEMPERAMENTS.

Digitized by the Internet Archive in 2015



HOGARTH.

From Portrait in the National Gallery.

Square Face, Outspread Nose, Short Neck.

See Scheme, Chap. iv.



OTHER SANGUINE CHARACTERISTICS.

- "Wm. Hogarth out of his apprenticeship is, I take it, a sturdy, ruddycomplexioned, clear-eyed (blue eyed—Austin Dobson) rather roundshouldered young fellow.
 - "A healthful, sanguine constitution.
- "He was an outspoken man, and his pencil and graver were as "unbridled as his tongue."—G. A. SALA.

1.6.89

OUR TEMPERAMENTS:

THEIR STUDY AND THEIR TEACHING.

A POPULAR OUTLINE.

BY

ALEXANDER STEWART, F.R.C.S. EDIN.

With Illustrations.

"It is something to have a perception of a large and general truth, and "it is another thing to follow out that truth in all its ramifications, and prove "it by such evidence as will satisfy ordinary readers."—BUCKLE.

"We must remember that a degree of knowledge far short of actual "prediction is often of much practical value."-J. S. MILL.





LONDON:

CROSBY LOCKWOOD AND CO., 7, STATIONERS' HALL COURT, LUDGATE HILL. 1887.

[All Rights Reserved.]

Printed by Hazell, Watson, & Viney, Ld., London and Aylesbury.

TO

THE MEMORY

OF

SIR ROBERT CHRISTISON, BART.,

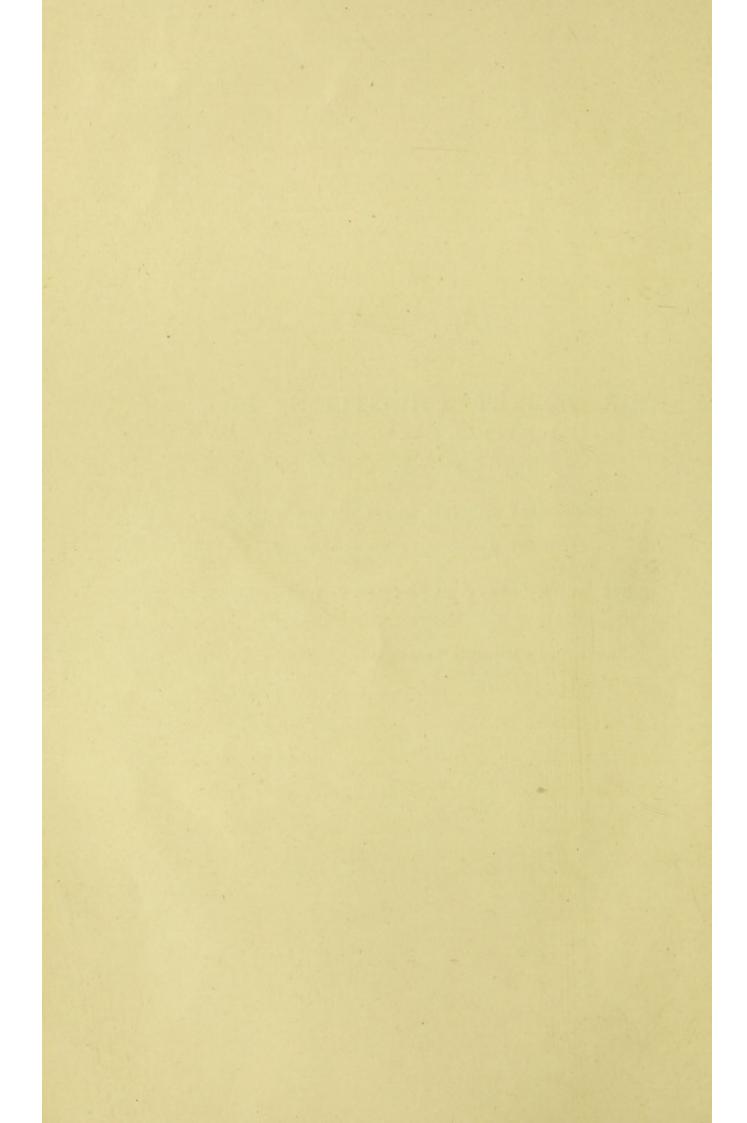
M.D., D.C.L. Oxon, LL.D. EDIN.,

Professor of Materia Medica in the University of Edinburgh,

WHOSE GREAT KINDNESS TO ITS AUTHOR WHEN A STUDENT HAS NEVER BEEN FORGOTTEN,

THIS WORK IS GRATEFULLY DEDICATED.

Queen Anne's Mansions, London, S.W. October 1886.



PREFACE.

I MPRESSED by the frequency with which the word temperament is used to account for the action that is taken not only on the ordinary but on the eventful occurrences of life; while so little is known of the temperaments that very few outside the medical profession can name off-hand the four principal ones,—the Sanguine, the Bilious, the Lymphatic, and the Nervous,—I have endeavoured to construct from scattered and scanty material and my own observation, a practical guide by which observers may know the temperament of any one by looking at him, and associate

with it certain mental qualities and traits of character.

"It is impossible to doubt that with every "temperament particular mental qualities are "associated."—Dr. Pritchard, F.R.S.

"Not Sanguine and diffusive he,

"But Biliary and intense."

Carlyle of Edward Irving.

Some proof of the doctrine of the temperaments—the association of certain mental qualities and traits of character with certain physical characteristics—is given in *Chap*. iii., founded on the experience of every one in reading faces, and on material found in the interesting and suggestive chapter "History of Twins," in "Inquiries into Human Faculty and its Development," by Francis Galton, F.R.S.

The Temperaments have occupied an important place in the science and practice of medicine since the time of Hippocrates, more than two thousand years ago, but have received scarcely any consideration in general literature.

Including as it does, to some extent, the association of mental qualities with outward appearance, it seems strange that the subject has not been cultivated apart from medicine.

Even in medical works I have been unable to find precise descriptions by which the temperaments may be known with certainty, and it may be assumed that such have not been given, as in a recent publication * an eminent surgical observer says:—

"As yet, I fear we must say that the labours "of the physiognomist, and those of the student "of temperament, have been alike disappointing.

* "The Pedigree of Disease. Being six lectures on Temperament, Idiosyncrasy, and Diathesis." 1884. By Jonathan Hutchinson, F.R.S., Emeritus Professor of Surgery in the London Hospital. "Whoever will set himself the task of attempt-"ing to classify a given number of individuals "according to their temperaments, will, I think, "soon find himself baffled."

As practical acquaintance with the temperaments must be imperfect without precise descriptions by which they may be distinguished from one another, I have submitted a scheme of the four pure temperaments—the Sanguine, the Bilious, the Lymphatic, and the Nervous—in which their physical characteristics and the associated mental ones are methodically arranged; and by numerous examples I hope to have enabled observers to discern, analyze, and name the far more numerous temperaments called compound temperaments—characteristics of two or more of the pure temperaments in one person.

"By the mixture of the physical characteristics of the four pure temperaments nature bestows on man the charm of variety that

"beautifies all her lesser works, and the study "of the temperaments will be pursued with "increasing interest when it is seen that even "one characteristic of a different temperament "from the principal one brings with it some-"thing of the mental action of its own tem-"perament. That, for instance, if black eyes "replace the blue ones of the Sanguine tem-" perament they bring more or less of the "caution, the persistence, the ambition of the "Bilious temperament; and, similarly, if blue "eyes replace the black ones of the Bilious "temperament they bring more or less of the "impulsiveness, the love of change, the un-"warranted hopefulness of the Sanguine tem-" perament " (chap. vii.)

The Temperaments having a limited range of mental association, cannot claim to supplant Expression, Physiognomy, or Phrenology; but they are more definite than Expression and Physiognomy, and more readily available than Phrenology.

Expression is read by every one in his

own way, intuitively, and cannot be reduced to a teachable system.

The expression of the eye, for instance!

Physiognomy and Phrenology, even had they not attempted the impossible—a measured estimate of mind and morals—would have failed as generally available systems; phrenological examinations requiring time and opportunity, and physiognomical details being so numerous and minute that few, if any, are able to remember them.

The physical characteristics of the temperaments, on the contrary, are definite, few, and readily observed.

The mental characteristics here associated with the physical ones are also few, and no claim of relationship is made between the temperaments and morality, or the higher powers of the mind, except imagi-

nation, which is assumed to be more especially associated with the physical characteristics of the Nervous temperament.

As the mental qualities and traits of character naturally associated with outward appearance may be more or less modified by the capability of adaptation and improvement that men are fortunately endowed with, attention has been drawn to the ordinary influences that may so far change the natural man.

The ability to infer mental qualities and traits of character from outward appearance, even to the limited extent in the Scheme (Chap. iv.), has a wide field of application, and I have given some consideration to the temperaments as guides in the education of youth and the choice of a profession.

Their influence on health is briefly noticed, and importance is given to the dependence of every pure temperament on a special internal organ of the body, and to the influence of derangement of its organ on the mental action of the temperament.

Popular ignorance of the temperaments having led to a random and unmeaning use of the word temperament in conversation and literature, "my temperament" and "his temperament" being in general use without thought of any particular temperament, a chapter is given to show the present unlimited and indefinite use of the word, and how its limited and definite use may be secured.

The concluding chapter is an endeavour to show that were the physical characteristics of the temperaments applied to word portraiture, the reader would see the subject of a biography with the mind's eye as if he had really seen and remembered him.

I have no doubt whatever that popular knowledge of the temperaments would result in the right man being oftener found in the right place; in the more likely choice of the best advisers; and in greater harmony of life between those living or working together, from consideration of the natural impulses and tendencies of the temperaments.

I therefore hope that I may have succeeded in rendering it practicable to recognize and name the temperaments, and that familiarity with them may soon become general.

Readers may wish that I had considered more fully the association of mental with physical characteristics, but my chief intention was to make known the physical characteristics by which they may observe for themselves and form their own conclusions. I feel warranted in having endeavoured to build up and attract attention to the subject, by a very long acquaintance with it; commenced when a student of medicine; continued in its practice, in which I have ever found it a trustworthy guide; and cultivated, apart from medicine, by observation of the association of mental with physical characteristics.

The title "Our Temperaments" is intended to show that the temperaments described are those of the people of our own country.

To enable observers to classify faces by the form characteristics of the temperaments, a sufficient number of engravings are given from Bohn's edition of *Lodge's Historical Portraits*, the proprietor having readily consented to their reproduction.

CONTENTS.

PART I.

THE STUDY OF THE TEMPERAMENTS.

CHAPTER I.

PRELIMINARY.

PAGE

No popular literature of the Temperaments.—
Origin in medicine.—Extracts from two medical authors showing the scope of the subject.—From John Stuart Mill and Mr. Buckle, acknowledging its importance, and complaining that it is undeveloped and obscure.

CHAPTER II.

GENERAL VIEW OF THE TEMPERAMENTS.

Men separated into four groups, or Temperaments: the Sanguine, the Bilious, the Lymphatic, and the Nervous.—The Tem-

PAGE

23

peraments are outward distinctions.—The practical value of the study wholly dependent on the natural association of mental qualities and traits of character with outward appearance.

CHAPTER III.

THE TEMPERAMENTS AND MIND.

Dr. Pritchard on the relation of mental peculiarities to corporeal structure.—The extent of the relation often exaggerated.—Extracts from Dr. Maudsley, John Inglesant, and Richerand.—Mind not limited by temperament.—Association of imagination with the nervous temperament.—The sculptured groups on the base of the Albert Memorial.

—Their temperaments and the character of their work.—Proof of the relation between traits of character and outward appearance, from reading faces, and from the "History of Twins"

CHAPTER IV.

SCHEME OF THE FOUR PURE TEMPERAMENTS.

The difficulty of distinguishing the temperaments acknowledged by authors.—Need of

standard descriptions.—Suggestion that their supply be undertaken by the Collective In-. vestigation Committee of the British Medical Association.—The temperaments not sufficiently utilized in medicine.—Mr. Jonathan Hutchinson's views.—The temperaments taught in the class-room, and clinically, by Professor Laycock.—Some of the descriptions of English authors.-A scheme of the four pure temperaments, in which their physical and mental characteristics are arranged for practical guidance.

APPENDIX, containing descriptions of the temperaments by the French physiologist, Richerand, and a Spanish author, Cortès . 83

CHAPTER V.

OBSERVATIONS ON THE SCHEME OF THE FOUR TEMPERAMENTS.

Colour characteristics.—Colour of the hair and eyes.-Change of colour of the hair and eyes.-Colour of the complexion. characteristics.—Assignment of the same form characteristics to the Sanguine, the Bilious, and the Lymphatic temperaments. -The form characteristics of the Nervous

PAGE

temperament.—The Sanguine, the Bilious, and the Lymphatic physically powerful temperaments.—The Nervous a gentle, imaginative, and intellectual temperament.—Probably an increasing temperament.—The mental characteristics of the scheme . . . 107

CHAPTER VI.

THE NERVOUS TEMPERAMENT.

CHAPTER VII.

THE COMPOUND TEMPERAMENTS.

The Compound temperaments very numerous.

—Their study somewhat complex.—Phy-

Marie Comment

sical and mental variety from the mixture of physical characteristics.—Descriptions of the Compound temperaments not found.—
The usual mode of naming the Compound temperaments.—Examples.—Proposed addition to their names that they may indicate personal appearance.—The analysis of Compound temperaments.—Compound characteristics.—The Oval Face and Medium Build.—The Balanced temperaments.
—Examples.—The Semi-balanced temperaments.—Examples.—The Best temperament.
—Forms of Compound temperaments to aid the student in analyzing faces . . . 143

CHAPTER VIII.

MODIFICATION OF THE TEMPERAMENT.

Modification by business pursuits. — Mrs. Carlyle.—Mr. Froude on professional mannerisms. — Modification by surrounding circumstances other than business pursuits. —By Oxford and Cambridge Universities. —Lord Houghton and Cardinal Manning. —Manner of speech.—Its susceptibility to modification early in life.—Change of temperament.—Dr. Wilks, Dr. Pritchard, and Mr. Buckle, on the causes which produce

PAGE

diversity of temperament.—National tem-
peraments.—Change in the colour of glass
eyes sold in America
APPENDIX: "British Calibre," from The
Times, on the Reports of the Anthropo-
metric Committee of the British Asso-
ciation.—"The Races of Britain," by Dr.
Beddoe, F.R.S
CHAPTER IX.
THE ORGANS OF THE TEMPERAMENTS.
The four temperaments named after four
internal organs of the body.—The four
organs, and their influence on the mental
action of the four temperaments.—Relation
of the four temperaments to the causes
of disease.—Food and the temperaments.—
Climate and the temperaments.—Effects on
Dickens of a month at Bonchurch, Isle of
Wight.—Quotations showing the depend-
ence of the natural mental action of the
temperaments on the healthy action of the
organs.—Return of natural mental action
with convalescence.—The temperaments and
minute structure.—Inheritance of disease
limited by personal likeness.—Importance
of such limitation in Life Assurance 237

PART II.

THE TEACHING OF THE TEMPERA-MENTS.

CHAPTER X.

THE TEMPERAMENTS AVAILABLE IN EDUCATION.

PAGE Preparation for competitive examinations often injurious to health.—Dr. J. Crichton Browne's views.—How the danger may be avoided.—Letter from Mrs. Elizabeth Garrett Anderson, M.D., on "Examinations for Girls." - Dr. Carver, late of Dulwich College, on the importance of the careful study of the aptitudes of each boy.—Their study facilitated by masters and parents becoming acquainted with the temperaments.—How parents may modify the mental action of their children's tem-APPENDIX: THOUGHTS ON EDUCATION, from

CHAPTER XI.

THE TEMPERAMENTS AVAILABLE IN THE CHOICE OF A PROFESSION.

CHAPTER XII.

THE TEMPERAMENTS AVAILABLE IN THE PROMOTION OF HEALTH,

The teaching of the temperaments as regards health.—Only nervousness considered.—Signs of nervousness.—Some of its causes.—Predisposition relative to the number of nervous characteristics.—Effects on business men and others.—Preventive and curative means.—Addison's modes of taking exercise.—The sleeplessness of nervousness.—

APPENDIX: "AMERICAN NERVOUSNESS." . 329

CHAPTER XIII.

THE USE OF THE WORD TEMPERAMENT.

In frequent use.—Should always indicate the physical characteristics of one of the four Temperaments, or a compound one.-Extracts showing that it seldom does .-Single mental or other traits wrongly called Temperaments.—List of twenty-seven socalled Temperaments.—Extracts containing some of them. - Temperament seldom used formerly.—Only once in Addison's Spectator .- Not once in Johnson's Rambler, or Idler, or Goldsmith's Vicar of Wakefield. -Probable reason. - Additional extracts showing the misuse of the word.—Standard descriptions of the four Temperaments essential to the right use of the word in literature and conversation

CHAPTER XIV.

WORD, BIOGRAPHIC, OR TEMPERAMENT PORTRAITURE.

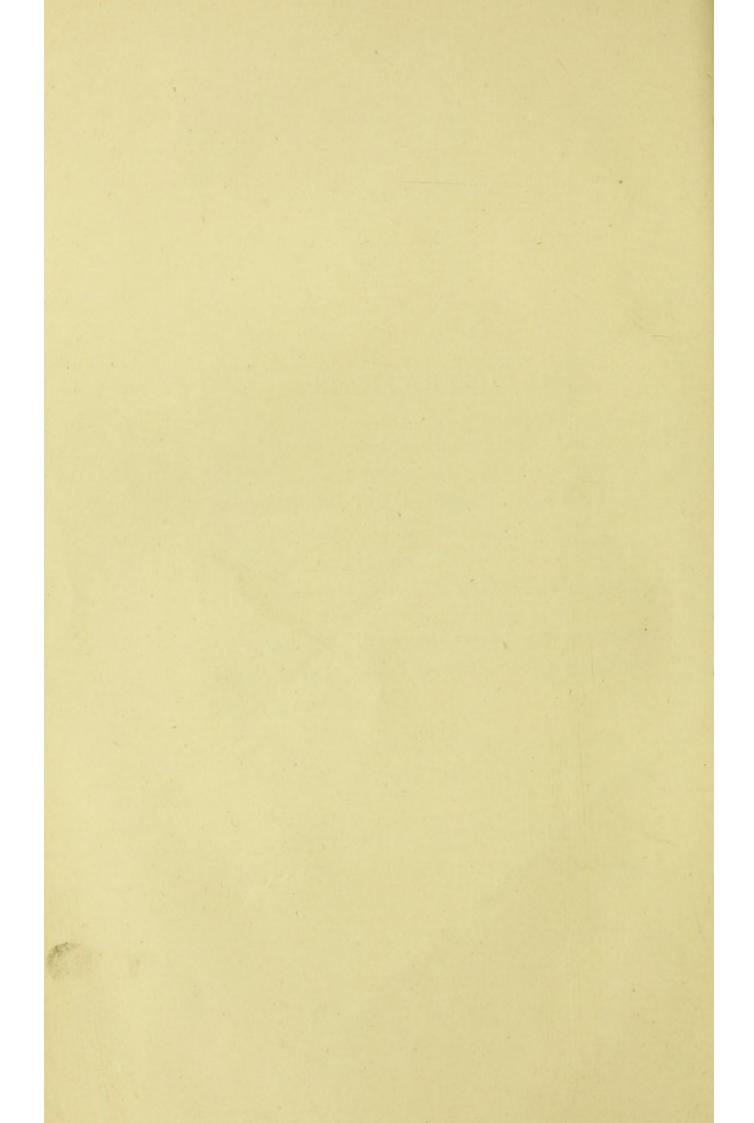
Conclusion.—Fields in which observation of the temperaments may yield useful results . 384

CLASSIFICATION OF FACES.

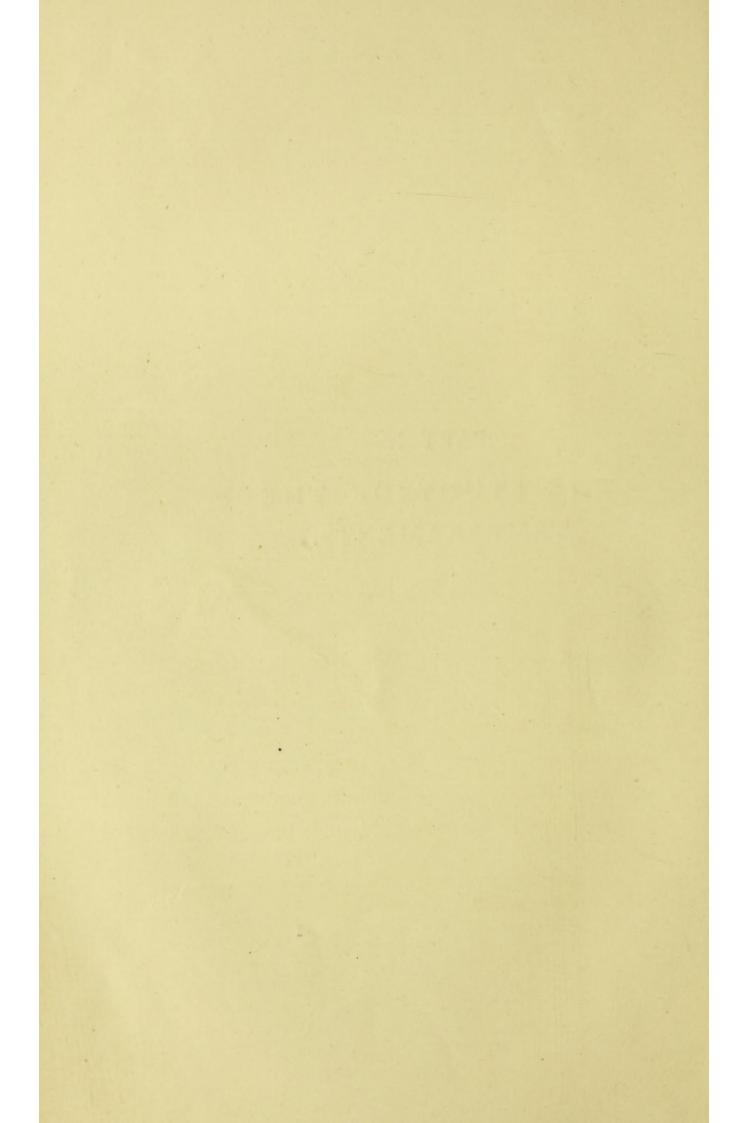
Forms of faces shown in a selection from Lodge's Historical Portraits.

ILLUSTRATIONS.

Тне	Square	FACE.	Hogar	th	:			Frontist	piece
Тне	MELANC	ногіс І	ACE					Page	71
Тне	Square	FACE.	Steele					"	119
	ELECTION								
SH	OWING TI	не Сні	EF FORM	IS O	F FAC	ES	End	of Voli	ıme



PART I. THE STUDY OF THE TEMPERAMENTS.



CHAPTER I.

PRELIMINARY.

No popular literature of the Temperaments.—
Origin in medicine. — Extracts from two medical authors showing the scope of the subject.—From John Stuart Mill and Mr. Buckle, acknowledging its importance, and complaining that it is undeveloped and obscure.

HAVE chosen our Temperaments for this essay* because they are not generally understood, but deserve to be; including as they do the natural association of certain external characteristics that are few and easily seen, with mental qualities and traits of character of sufficient importance that to be able to indicate them from out-

^{*} The essay now published is the enlargement of one read to a private society in January 1881.

ward appearance must always be interesting and often useful.

I hope to be able to show that acquaintance with this natural association is of special value in

- 1. Education,
- 2. The choice of a profession, and
- 3. The promotion of health.

The frequent and almost always indiscriminate use of the word temperament also influenced me, and my choice was finally determined by the hope that my observations might be supplemented by our President who, by some striking remarks that fell from him in another place on the influence of the temperaments on religious feeling and life, showed that he has given the subject thoughtful consideration.

While recently at Cambridge I searched the catalogues of King's College and other libraries of the University for English works on the temperaments, but found none; and I became aware that I had a difficult task before me,—to construct from scattered and probably insufficient material a concise view of the subject for practical guidance.*

Medical literature past and present is the home of the subject. Elsewhere, even in cyclopædias and works on mental and moral philosophy it seldom finds a place,

* Continuing the inquiry, I was told of a volume of sermons: "The Four Temperaments, together with some Occasional Sermons, by William Clark, M.A., Prebendary of Wells and Vicar of Taunton. 2nd edition. 1874."

The volume being out of print, I should have failed to procure a copy had I not applied to the author, who kindly lent me his own.

The four temperaments are taken from St. Luke: ch. ix., the Choleric (bilious), vers. 51—56; the Sanguine, vers. 57 and 58; the Phlegmatic (lymphatic), vers. 59 and 60; the Melancholic, vers. 61 and 62; and there is a fifth sermon—a general view and application of the whole subject—from St. James i. 17.

and when it does is generally treated very briefly and at second-hand, medical works being the source of information.

As mental and moral action are largely attributed to temperament, one might have expected the subject to have had at least as many ardent cultivators as Physiognomy and Phrenology. That it has not may be ascribed to its having arisen out of the practice of medicine and been always looked upon as a purely medical subject.

The ancient physicians, not having the stethoscope and other modern means of bringing the internal organs of the body into view, as it were, eagerly cultivated a knowledge of external signs, and soon found that men who differ remarkably in outward appearance and conformation, as dark and fair, for instance, are predisposed to diseases of a different class or character, and that even the same diseases affect

them differently and may require a somewhat different treatment. They therefore observed with keen professional interest the resemblances and differences among men.

Their observations having accumulated, Hippocrates, the father of medicine, founded the doctrine of temperaments four hundred years before the Christian era; and although primitive ideas of the composition and structure of the different parts of the body have been discarded, and erroneous views of the functions of the internal organs corrected, the physical distinctions and descriptions of Hippocrates and Galen have been reproduced by nearly all modern writers on the subject.

Dr. Cullen in Materia Medica, 1779, says:—

"The moderns have neither by observation extended the ancient distinctions, nor, though "they have often attempted it, have they ever "given, so far as I can judge, any happy "explanation of the causes or foundation of the distinctions they have so generally "adopted."

Professor Laycock observes:-

"Although the many attempts which have been made to establish a complete and practical doctrine of temperament have been unsuccessful, the general principles first eliminated from experience remain to this day."

All medical writers who have gone beneath the surface of the subject, while acknowledging its great professional value, lament that it has received so little attention and is without precision.

It is indeed surprising that it is perhaps the only part of medical science that has stood still and remains not only unsatisfactory and behind the age, but is even in danger of being altogether neglected.

Dr. Cullen says:-

"I believe it will be generally allowed that "this part of medical doctrine is still in an "embarrassed and undetermined state."

Dr. Wilks in a valuable contribution to Guy's Hospital Reports for 1869, having insisted on its great value in medicine, says:—

"And yet, singularly enough, with one or two exceptions, our teachers of medicine seem to have forgotten the doctrine of temperaments, which occupied so large a part of the old schools of education."

In the following extracts from medical works, one written only a few and the other a great many years ago, similar complaint is made, and I give them at length as they present the more important

practical results, apart from medicine, of which the doctrine seems capable.

"The study of the temperaments has been "too much neglected in modern institutions. "Freed from the barbarous and hypothetical "jargon with which it was formerly clogged, "it forms a most interesting and important "branch of the science of man. It is not "now to be confined to the doctrine of the "humours and their various combinations. "Individual character is its object, and it "embraces the whole of the distinction by "which that character is marked. Its indica-"tions are useful, not only as announcing "predisposition to particular diseases, but as "proclaiming the nature and objects of our "moral affections. But in giving due regard "to these indications, we should endeavour "to separate what depends on original confor-"mation from the more variable and accidental "appearances which are produced by habits or "education." - Edinburgh Medical and Surgical Journal, vol. iv., p. 749: 1808.

Dr. Maudsley in The Pathology of Mind, 1879, says of Temperament and Idiosyncrasy:—

"Unfortunately these big words are at "present little better than cloaks of ignorance; "they are symbols representing unknown "quantities, rather than words denoting de-"finite conditions; and no more useful work "could be undertaken in psychology than a "patient and systematic study of individuals, "-the scientific and accurate dissection and "classification of the minds and characters of "particular men in connection with their "features and habits of body. How vast a "service it would indeed be to have set forth "in formal exposition the steps of the quick "process by which the shrewd and experienced "man of the world intuitively judges the "characters of those he has to do with, and "refers them in a moment instinctively to "their proper classes in his mind!"

These extracts show that the study of the temperaments has a far wider scope than medicine, and that there is a craving among those professionally acquainted with the subject for the development and general application of what they have frequent proof of—the association of certain mental qualities and traits of character with the physical characteristics of the temperaments.

- J. S. Mill and Mr. Buckle complain that "a subject so intimately connected with matters of the highest importance" should have remained undeveloped.
- J. S. Mill when considering the causes that modify mental character, says:—

"That differences of bodily structure also co-operate is the opinion of all physiologists, confirmed by common experience. It is to be regretted that hitherto this experience, being accepted in the gross without due analysis, has been made the ground-work of empirical generalizations detrimental to the progress of real knowledge."

Mr. Buckle says:—

"We are completely in the dark as to the circumstances which regulate the hereditary transmission of character, temperament, and other peculiarities. . . . None of the laws of hereditary descent connected with the formation of character have yet been generalized, nor is our knowledge much more advanced respecting the theory of temperaments.

"The difficulty attending the study of temperaments, and the obscurity in which this important subject is shrouded, may be estimated by whoever will compare what has been said by the following writers."

He refers to a number of well-known medical authors—foreign and English.

The subject has remained obscure and difficult because hitherto it has been subservient to medicine.

I am sanguine that were it a part of general literature it would be raised out of the rut in which it has lain for two thousand years, be brought within every man's comprehension, and become practically valuable.

CHAPTER II.

GENERAL VIEW OF THE TEMPERAMENTS.

Men separated into four groups, or Temperaments: the Sanguine, the Bilious, the Lymphatic, and the Nervous.—The Temperaments are outward distinctions.—The practical value of the study wholly dependent on the natural association of mental qualities and traits of character with outward appearance.

THE Temperaments are groupings of the chief physical characteristics which distinguish men from one another,—dark or fair, stout or slim, a square, oval, or tapering face, a short or long neck, etc.

—See Scheme, chap. iv.

The temperament is the mould in which

men who resemble one another are said to be made:—

- "Amongst these knights there were three brothers bold,
- "Three bolder brethren never were ye borne,
- "Borne of one mother, in one happy mould."

-The Faerie Queen.

Dr. Wilks says:-

"A patient enters the doctor's study, and he "will perhaps call to mind that he is only "another specimen of fifty patients, who seem "to have been taken out of the same mould;" and adds, "If this be true, a good history of "man and his varieties has yet to be written."

—Guy's Hospital Reports, 1869.

Carlyle goes farther than casting in moulds:—

"A big, burly brother of hers, a clergyman whom I have seen, struck me as kneaded out of the same clay."

Likeness between men is not of the face

GENERAL VIEW OF THE TEMPERAMENTS. 17

only, or we should not on tapping the shoulder of a supposed friend overtaken in the street, find on his turning round that we had made the awkward mistake of tapping the wrong man.

Prince Bismarck writes of Prince Napoleon:—

"I will only say, that I was struck by the "resemblance between him and President Ger-"lach, not only in the features, but also as to "gestures, and play of countenance."

Hippocrates and his followers found it practicable, by the resemblance and difference between men, chiefly in the colour of the hair, of the eyes, and of the complexion, to sort them into four groups, into one or another of which, or one of their compounds, every person can be placed.

The four groups are the four Temperaments, named, from their dependence on the principal internal organs of the body,

The Sanguine. The Lymphatic. The Bilious. The Nervous.

These are the pure or unmixed temperaments, seldom seen compared with combinations of two, three, or all of them, called the compound temperaments.

The Melancholic formerly held place as one of the four temperaments, but on insufficient grounds, and has therefore been excluded, and the Nervous temperament is now ranked, instead, as one of the four.

As the popular use of the term temperament refers only to the habit of mind that prompts to action, it may surprise many to learn that the temperaments are recognized distinctions in merely the outward appearance. Yet, such they were originally, having been founded on the observed relationship between the features

of disease and the features and appearance of men, and such they still are in medicine; a patient's temperament and its influence being known by a glance at his face and figure.

Not only in medicine—

"Dürer in his Treatise on Proportion expressly "proposes to indicate by means of the outward "measurement and proportions of the figures, to "which of the four temperaments they belong."*

That the temperaments are external distinctions is a fundamental fact that, except professionally, seems little known: the word temperament and the common phrases "my temperament" and "his temperament" being almost invariably used without thought of external appearance or any particular temperament, and therefore without obvious meaning.

That mental qualities and traits of cha-

^{*} Albert Dürer, His Life and Times. 1882.

of the temperaments, is obvious from their having been named Sanguine, Bilious, Lymphatic, and Melancholic, after the bodily organs; the heart; the liver (or rather its product the bile); and the lymphatics. Also, from the term temperament implying mixing together; the idea being that the four elements of which the body was supposed to be composed were mixed together in various proportions in the temperaments.

"The words temper and temperament are "from the Latin verb tempero, to mix, or temper, "as mortar."

"The mixing differs so that one or other temperament predominates."—Laycock.

"It must be remembered that the ancients, "from the time of Hippocrates, held the opinion "that there existed four kinds of humours in "the human body—blood, bile, black bile, and "phlegm,—and that as one or other of such "humours was present in excess, the individual

"was said to be of a sanguineous, bilious, "melancholic, or phlegmatic temperament."—

Dr. Garrod.

As there are not two kinds of bile, black being only concentrated yellow bile, the melancholic—atrabilious—black bile—temperament, had no sufficient claim to be classed as one of the four temperaments, and, as already stated, has given place to the nervous.

Although the temperaments were originally only physical distinctions, certain mental qualities and traits of character have been associated with them from a very early period, and they should therefore be regarded as consisting of two parts—a physical part, and a correlated mental part;—the natural association of the mental with the physical—of the mind with the body—constituting the popular value of the doctrine of the temperaments.

"To these varieties of bodily constitution

"and external aspect, certain peculiarities of "mind, of temper or disposition, were supposed "to be superadded. The connexion of mental "or psychical qualities with those of physical "organization constitutes an essential part of "the theory of temperaments."—Dr. Pritchard, "Cyclopædia of Practical Medicine."

The study of the temperaments could have no practical value, could lead to no teaching apart from medicine, but for the recognition of a physical part and a mental part of every temperament, and the dependence of the mental on the physical.

As mental qualities and traits of character have been associated with the temperaments for at least two thousand years, it is surprising that so important a part of the doctrine has remained without precision, and therefore incapable of useful application.

CHAPTER III.

THE TEMPERAMENTS AND MIND.

Dr. Pritchard on the relation of mental peculiarities to corporeal structure.—The extent of the relation often exaggerated.—Extracts from Dr. Maudsley, John Inglesant, and Richerand.—Mind not limited by temperament.—Association of imagination with the nervous temperament. — The sculptured groups on the base of the Albert Memorial. —Their temperaments and the character of their work.—Proof of the relation between traits of character and outward appearance, from reading faces, and from the "History of Twins."

DR. PRITCHARD in his article "Temperament" in the "Cyclopædia of Practical Medicine," says:—

"The relation of mental peculiarities to "corporeal structure has been observed by "medical authors of every age. In the "writings of Galen there is a treatise expressly "composed to prove that the characters of men depend on their temperaments. But it is in the works of modern writers that we find this doctrine most fully developed and made a foundation of human characters. It is extremely improbable that an opinion should have held its ground for so many ages among men of observation, especially on a subject requiring no abstruse research, without some foundation at least in fact. The doctrine of the temperaments is true to a certain extent, and has ever been confirmed by an appeal to experience.

"States of the mind are so connected with affections of the body that it is impossible for any one who considers the facts which present themselves to doubt that with every temperament particular mental qualities must be associated, although it is manifest that many writers have indulged their fancy on this subject, and have gone into more full and minute details than experience will establish."

With this charge of exaggeration I fully

agree, claiming as I do a very limited power of the temperaments over mind.

In literature and conversation every mental manifestation and every trait of character are attributed to temperament; "his temperament" having in popular use the widest possible range, including not only every mental quality, but every virtue and every vice.

Dr. Maudsley in the volume I have already quoted (The Pathology of Mind, 1879), says:—

"It is not amiss to reflect, when weighing beliefs, that belief is very much a matter of temperament."

In John Inglesant, vol. i., page 121, is the following:—

"This is the most important lesson that a "man can learn—that all creeds and opinions "are nothing but the mere result of chance "and temperament." Richerand, a French physiologist whose descriptions of the temperaments (see appendix to chap. iv.) have been more or less reproduced by most English writers, says:—

"I have no doubt that the influence of "the physical organization on the intellectual "faculties is so decided that we may regard as possible the solution of the following problem, analogous to that with which "Condillac concludes his work on the origin of human knowledge."

"The physical man being given, to deter-"mine the character and extent of his capacity, "and to assign consequently not only the "talents he possesses but those he is capable "of acquiring."

I do not believe that the mind of man is thus hampered in its operations or circumscribed by such definite bounds. Shakespeare, Newton, and others whose It may be that only the mode of mental action is influenced by external appearance—that the mind is impelled to action sooner, and that the energy and continuance of its action are greater in some of the temperaments than in others.

A similar view is expressed at length in the following extract from "The Book of Health," page 82 (Cassell & Co., 1882):—

"Unquestionably, there is more of vital "action in a given time in some individuals "than in others.

"In a strictly physiological sense, some live "much faster than others, and die prematurely only if the amount of life is to be measured by time, but not if the amount of it may be estimated by action.

"This difference is recognised in a vague

"sort of way in different temperaments." Whatever classification of temperaments be "adopted, and whatever definition be given "of this or that particular kind, the degrees "of vital activity in each case cannot be "excluded from consideration. Nay, whether "it be more or less obvious in each case, it "probably constitutes the principal feature."

It will be seen that in the scheme of the four pure temperaments (chap. iv.),—an arrangement of their chief physical and associated mental characteristics which I have made for practical guidance,—I have limited the natural association of mind with outward appearance to only a few mental qualities and traits of character.

Observation warrants me I think not only in limiting the mental traits associated with physical characteristics to those of the scheme, but in assuming that reason, memory, and the other mental powers are, with one exception, uninfluenced by them; the exception being the association of Imagination, not only in its greatest flights but in its every day manifestations in the ordinary affairs of life, with the physical characteristics of the Nervous or cerebral temperament.

The busts and reliable portraits of eminent men will generally be found to show a marked connection between the temperament and the character of the work that has led to fame; that the face tapering to the chin from a broad or high forehead, small features, and a long neck—the Nervous temperament (see Scheme, chap. iv.)—characterize the greater number of those whose fame rests on works in which imagination reigns; and that a square face, broad features, and a short neck, the physical characteristics of the three other pure temperaments,—the Sanguine, the Bilious, and the Lymphatic (see Scheme),—

characterize, more or less, the greater number of those whose famous works are of a more material or physical character.

Were this interesting enquiry pursued—comparison of the features of famous men with the character of their works—not only, I think, would the relation which I have indicated between imagination and the four pure temperaments,—the Sanguine, the Bilious, the Lymphatic, and the Nervous,—be found generally true; but I think it would also be found generally true, that when even one of the physical characteristics of the Nervous temperament had displaced one of the characteristics of any of the three other pure temperaments, it imported some of the imaginative power of its own temperament (ch. vii.).

Some proof of the association of the form characteristics of the Nervous or cerebral temperament with intellect, and probably with imagination, is afforded by the sculptured groups of famous poets, painters, musicians, sculptors, and architects round the base of the Albert Memorial in Hyde Park.

There are one hundred and sixty-nine figures, and observers may be surprised how greatly the face tapering from a high or broad forehead prevails in all the classes, and that—especially in the groups of the poets, the painters, and musicians—the exceptions are so few.

Greater variety is observed among the sculptors and architects; and it may be that imagination and originality are less essential to lasting fame in them than in poets, painters, and composers.

If the doctrine of the temperaments the association of certain mental with certain physical characteristics—is well founded, workers in the same field, whose work differs, should themselves differ in appearance. The character of Wordsworth's, Byron's, and Scott's poetry is unlike, and so are their portraits.

It may make the association of certain mental qualities with every temperament more acceptable to many, to know that it rests on a basis of proof common to the temperaments, to expression, and to physiognomy, viz., the general belief that a reliable opinion of a man's character can often be formed by looking at him, and that such belief is the result of comparison of faces and characters.

In The Spectator, No. 86, Addison says:-

"I am so apt to frame a notion of every man's humour or circumstances by his looks, that I have sometimes employed myself from Charing Cross to the Royal Exchange in drawing the characters of those who have

"passed by me. . . . I think we may be better known by our looks than by our words."

At the Mansion House on Lord Mayor's Day, 1883, Mr. Gladstone said:—

"It is true, my Lord Mayor,* that I do not meet you on this occasion as one unknown to me. You and I have had as good opportinities as any two persons in this hall of making accurate studies of one another—of one another's features and personal appearance, from which, by an intelligent eye, it is well known that so much is to be learnt."

It has not I think been realized that always when mental traits are inferred from the features, we are guided by those that have been found in one or more similar faces.

Relatives, companions, teachers, public characters, and others whom we have

^{*} Sir Robert Fowler, M.P.

seen much of in early life, supply examples of marked physical characteristics associated with equally marked mental ones, and serve as standards with which at first similar faces are compared.

Other standards of comparison are soon added, and before long we come to rely on the almost constant association of certain mental with certain physical characteristics—that when two faces and figures are strikingly alike the men will be strikingly alike in their action, manners, mode of speech, etc., unless their lives have been in very different grooves.

When belief has thus become established, our judgment of a man's character from his face and figure is so rapid that it appears intuitive, and the fact of comparison with some other face is only brought home to us when we see an unusually

Mr. F. Galton, F.R.S., whose work "Hereditary Genius" is so well known, has lately published a volume, "Inquiries into Human Faculty and its Development," 1883, in which there is a most interesting and suggestive chapter, "History of Twins," and although the temperaments of the twins referred to are not given, the association of similar mental with similar physical characteristics is all but fully proved by perfectly reliable records. Mr. Galton sent

"Circulars of inquiry to persons who were "either twins themselves or near relatives of "twins, with the view of ascertaining the in"fluence of nurture on nature: whether twins "who were closely alike in boyhood and youth, "and who were educated together for many years, subsequently grew unlike, and if so, "what the main causes were which, in the

"opinion of the family, produced the dis-"similarity.

"Also, how far the characters of twins who were exceedingly unlike in childhood, became assimilated under the influence of identical nurture, inasmuch as they had the same home, the same teachers, the same associates, and in every respect the same surroundings."

Of the numerous records received, he takes into account thirty-five sufficiently detailed cases of close similarity, and twenty of great dissimilarity, for—

"It is a fact that extreme dissimilarity, such as existed between Esau and Jacob, is a no less marked peculiarity in twins of the same sex, than extreme similarity.

"When the twins are a boy and a girl, they are never closely alike."

Mr. Galton quotes some very remark-

able replies concerning twins who could not be distinguished by their nearest relatives, and several amusing results of their mistaken identity.

Similar mental qualities and traits of character were observed in twins who closely resembled each other, and dissimilar ones in those between whom there was no resemblance, so far proving the doctrine of the temperaments; and had the temperaments of the thirty-five pairs of twins been named, the replies would probably have fully proved the doctrine by showing that pairs of twins whose temperaments were the same had similar mental qualities and traits of character.

The chief results of Mr. Galton's circulars may be appropriated in corroboration of the doctrine of the temperaments—the association of similar mental action and traits with similar physical characteristics.

In the following paragraph similarity of "manner, personal address, and voice" in twins who were similar to look at is noticed, and these and other points will, I think, be generally found more or less similar, sometimes strikingly so, not in twins only, but in all between whom there is a close resemblance.

"The manner and personal address of the thirty-five pairs of twins are usually described as very similar, but accompanied by a slight difference of expression familiar to near relatives, though unperceived by strangers. The intonation of the voice when speaking is commonly the same, but it frequently happens that the twins sing in different keys."

Similarity of organization in those of the same temperament is insisted on in chapter ix. of this essay, and is fully corroborated by the two following extracts:—

"Both twins were apt to sicken at the same "time in no less than nine out of the thirty-"five cases. Either their illnesses were non-"contagious, or, if contagious, the twins "caught them simultaneously; they did not "catch them the one from the other. Thus, "the father of two twins says:-

"'Their general health is closely alike; when-"'ever one of them has an illness, the other "'invariably has the same within a day or two, "'and they usually recover in the same order. "'Such has been the case with whooping-cough, "'chicken-pox, and measles; also, with slight "' bilious attacks, which they have successively. "'Latterly, they had a feverish attack at the " 'same time.'

"The next point which I shall mention in "illustration of the extremely close resemblance "between certain twins is the similarity in the "association of their ideas. No less than "eleven out of the thirty-five cases testify to "this. They make the same remarks on the "same occasion, begin singing the same song "at the same moment, and so on; or one would commence a sentence, and the other would finish it.

"An observant friend graphically described to "me the effect produced on her by two such "twins whom she had met casually. She said: "Their teeth grew alike, they spoke alike and "together, and said the same things, and "seemed just like one person."

"The last point to which I shall allude re"gards the tastes and dispositions of the thirty"five pairs of twins. In sixteen cases, that is,
"in nearly one-half of them, these were de"scribed as closely similar; in the remaining
"nineteen they were much alike, but subject to
"certain named differences.

"It follows from what has been said "concerning the similar dispositions of the "twins, the similarity in the association of their "ideas, of their special ailments, and of their "illnesses generally, that their resemblances are "not superficial, but extremely intimate.

"I have only two cases of a strong bodily "resemblance being accompanied by mental "diversity, and one case only of the converse "kind."

The following are some of the replies summarised as above by Mr. Galton.

The daughter of a twin says:-

"Such was the marvellous similarity of their features, voice, manner, etc., that I remember as a child being very much puzzled, and I think had my aunt lived much with us, I should have ended by thinking I had two mothers."

A medical man writes of twins with whom he is well acquainted:—

"Whilst I knew them, for a period of two "years, there was not the slightest tendency towards "a difference in body or mind; external influ-"ences seemed powerless to produce any dis-"similarity."

A father writes:-

"At birth they were exactly alike, except that one was born with a bad varicose affection, the effect of which has been to prevent any violent exercise, such as dancing or running, and as she has grown older, to make her more serious and thoughtful. Had it not been for this infirmity, I think the two would have been as exactly alike as it is possible for two women to be, both mentally and physically; even now they are constantly mistaken for one another."

Proof of the doctrine of the temperaments from similarity of mental action and traits in twins who were alike, is complemented by dissimilarity in those who were unlike. Of the replies concerning the twenty cases of twins who were unlike, Mr. Galton gives the following:—

(1) "They have had exactly the same "nurture from their birth up to the present "time; they are both perfectly healthy and

"strong, yet they are otherwise as dissimilar as two boys could be, physically, mentally, and in their emotional nature."

- (2) "I can answer most decidedly that the "twins have been perfectly dissimilar in "character, habits, and likeness from the "moment of their birth to the present time, "though they were nursed by the same "woman, went to school together, and were "never separated till the age of fifteen."
- (3) "They have never been separated, never "the least differently treated in food, clothing, "or education; both teethed at the same "time, both had measles, whooping-cough, and "scarlatina at the same time, and neither has "had any other serious illness. Both are "and have been exceedingly healthy, and have "good abilities; yet they differ as much from "each other in mental cast as any one of "my family differs from another."
- (4) "Very dissimilar in body and mind: "the one is quiet, retiring, and slow but

"sure; good tempered, but disposed to be "sulky when provoked; the other is quick, "vivacious, forward, acquiring easily and "forgetting soon; quick-tempered and choleric; "but quickly forgiving and forgetting. They "have been educated together and never been "separated."

- (5) "They were never alike either in body "or mind, and their dissimilarity increases daily. "The external influences have been identical; "they have never been separated."
- (6) "The two sisters are very different in "ability and disposition. The one is retiring "but firm and determined; she has no taste "for music or drawing. The other is of an "active, excitable temperament; she displays "an unusual amount of quickness and talent, "and is passionately fond of music and drawing. "From infancy they have been rarely separated "even at school, and as children visiting their "friends they always went together."
 - (7) (8) (9) These three replies are less

45

definite than the others, but also record natural dissimilarity continuing under the same influences.

- (10) "This case is, I should think, some"what remarkable for dissimilarity in physique
 "as well as for strong contrast in character.
 "They have been unlike in body and mind
 "throughout their lives. Both were reared in
 "a country house, and both were at the same
 "schools till æt. sixteen."
- (11) "Singularly unlike in body and mind "from babyhood; in looks, dispositions, and "tastes they are quite different. I think I "may say the dissimilarity was innate, and "developed more by time than circumstances."
- (12) "We were never in the least degree "alike. I should say my sister's and my own "character are diametrically opposed, and have "been utterly different from our birth, though a "very strong affection subsists between us."
- (13) "Curiously different in body and mind "from birth, my brother and I were comple-

"mentary, so to speak, in point of ability and disposition. He was contemplative, poetical, and literary to a remarkable degree, showing great power in that line. I was practical, mathematical, and linguistic. Between us we should have made a very decent sort of a man."

Interesting and valuable as Mr. Galton's "History of Twins" is, whoever has given attention to this essay, even so far, cannot fail to see that the history would have gained in precision of description, and, therefore, in value and interest, had the temperaments been known and named by those who replied to Mr. Galton's circulars.

CHAPTER IV.

SCHEME OF THE FOUR PURE TEMPERA-MENTS.

The difficulty of distinguishing the temperaments acknowledged by authors.—Need of standard descriptions.—Suggestion that their supply be undertaken by the Collective Investigation Committee of the British Medical Association.—The temperaments not sufficiently utilised in medicine.—Mr. Jonathan Hutchinson's views.—The temperaments taught in the class-room, and clinically, by Professor Laycock.—Some of the descriptions of English authors.—A scheme of the four pure temperaments, in which their physical and mental characteristics are arranged for practical guidance.—

Appendix, containing descriptions of the temperaments by the French physiologist, Richerand, and a Spanish author, Cortès.

A UTHORS, past and present, acknowledge the necessity and difficulty of distinguishing the different temperaments.

The celebrated Dr. Cullen writes thus in 1779:—

"Philosophy would require that I should in "the first place distinguish temperaments by "marking the external and observable circum-"stances which are found, with some steadiness, "to be commonly combined together; but this "I find a difficult task, and what my own "observation has not been so extensively applied "to as to enable me to perform in the manner "I would wish."—Materia Medica.

Mr. Starkweather, who, in a recent work (The Law of Sex, 1883) gives temperament a chief place in the determination of sex, and is obviously well acquainted with the descriptions of the temperaments by authors of all countries and every period, says (page 110):—

"There is, perhaps, no point upon which authorities differ so strangely, as what temperament really is, and in determining to which class any given individual properly belongs."

Mr. Jonathan Hutchinson, F.R.S., says:

"As yet I fear we must say that the labours "of the physiognomist and those of the student "of temperament have been alike disappointing. "Whoever will set himself the task of attempt-"ing to classify a given number of individuals "according to their temperaments will, I think, "soon find himself baffled. . . . Dr. Laycock's "is, so far as I know, the last, and certainly by "far the best of all attempts to classify the "temperaments, yet Dr. Laycock's classification "is also, in common with the older ones, open "to the criticism that it affords us but few facts "by which to recognise them."—The Pedigree of Disease, Lecture I.

Dr. Laycock, however, says of his classification *:-

"I think it will serve all the practical purposes of observation and generalization, and place us finally in a position to bring the doctrine of temperaments to a level with modern physiology."

^{*} Lectures in Medical Times and Gazette, 1862, vol. i.

In the same lecture, page vii., Mr. Hutchinson says:—

"I come then back to my point, and assert "that whoever will set himself to classify by "temperament a dozen healthy individuals whom "he may chance to meet on a steamboat, in a "law court, or at a dinner party, will find that "he has scarcely any data excepting those of "complexion. He will find, moreover, unless "I am much mistaken, that if he attempts to go beyond mere complexion, there are not more "than two or three in the dozen whom he can "with any degree of confidence assign to special "temperaments."

I am hopeful that the attempt I have made to assign characteristics of form, as well as of complexion or colour to the different temperaments, that they may be readily recognized and named, may induce competent observers to pursue this fundamental part of the subject, and that descriptions may ere long be supplied

which may become generally accepted as standard descriptions.

"You will find it necessary to form stan-"dards for physiognomical comparison. You "should incessantly observe the healthy charac-"teristics of persons of various races, ages, "sexes, rank, occupations, and the like, so "that right standards of comparison may be "formed."—Dr. Laycock.

It is obviously essential to uniformity of meaning that when the temperament of any one is referred to as sanguine, bilious, lymphatic, or nervous, a mixed or compound one, the name of the temperament should indicate definite physical characteristics.

Mr. Hutchinson was addressing the medical profession in the theatre of the Royal College of Surgeons when he said that the best classification yet given does not enable the observer to classify individuals according to their temperaments.

Even in medicine therefore—the home of the subject—there are no standard descriptions by which the temperaments may be known.

In the important lecture on Temperament from which the foregoing extracts are taken, Mr. Hutchinson examines the whole subject most carefully, and—disappointed—is obliged to conclude that not only is it impossible to distinguish the different temperaments by the features assigned to them, but that there is very little proof of the influence of temperament on disease and its treatment. He is careful, however, to guard against its being thought that he does not believe in the usefulness of temperament in medicine, were it possible to discriminate it.

"I have said so much in disparagement as "well of the general as of the special signs "which have been held to indicate tempera"ment, that I fear it may be suspected that "I almost doubt the reality of temperament "in itself. If I have given that impression, "let me hasten at once to remove it. There "can be no question whatever as to the "reality of the difference between individuals, "nor any doubt as to the importance of the "recognition of those differences by the medical "practitioner.

"Temperament is unquestionably a real force, and one which we would most gladly recognise and estimate if we could. The scepticism which I have been expressing applies not to the reality of the thing, but to our ability to discriminate it."

There can be no reliable records of the influence of temperament on disease and its treatment unless the name given to the temperament of a patient enables the mind's eye of the reader to see his face, features, and build, as the recorder saw them; and such cannot be till precise descriptions by which the different temperaments can be recognized have been generally accepted by the profession.

In the "Record of Family Faculties, 1884," there is a schedule of queries which Mr. Galton circulated "to further the science of heredity," and the following reasons are given for the twelfth query.

"12. Character and Temperament.

"Nearly every individual is notable for some peculiarity of mind or disposition, and in some few persons the sanguine, melancholic, nervous, or lymphatic temperament is well marked. All such peculiarities should be noted, as they are strongly hereditary, and may throw much light on the faculties of the family. Moreover, the study of them is peculiarly attractive."

As few have more than a vague idea of the temperaments, it would have been well had Mr. Galton secured reliable replies to the query by appending to his

schedule precise descriptions by which the different temperaments may be distinguished. I have asked many a lay friend who said, "I cannot help it; it is my temperament," to tell me the name or names of his temperament, but not one could do so with sufficient precision for statistical conclusions.

The Collective Investigation Committee of the British Medical Association have entered on a similar path of public enquiry,* and the first two observations asked for:—

- 1. Colour of eyes,
- 2. Colour of hair,

are chief temperament characteristics (see Scheme, chap. iv.), and lead me to suggest that the Committee would do essential

* "Life History Album," prepared by direction of the Collective Investigation Committee of the British Medical Association. Edited by Francis Galton, F.R.S. 1884.

service to medicine by promoting the investigation of the subject of temperament, first by supplying the profession with precise descriptions of the different temperaments, the want of which renders uncertain of meaning whatever is said or written concerning them, and afterwards by collecting the results of their application to practice.

It is humiliating that a doctrine which has always been an acknowledged part of medicine, and is capable of useful application to every case of illness, should still be so practically useless that an observer so experienced as Mr. Hutchinson should be obliged to say:—

"I have been speaking thus far on the "subject of temperament considered as the "aggregate of a man's physical personality, "and have felt obliged to return the verdict "that its study in this form is but little "useful for our purposes as surgeons."

In a quotation already given, and throughout his lecture, Mr. Hutchinson ascribes the blame, not to temperament itself, but to our inability to discriminate it.

He thus acknowledges the necessity for such discrimination in practice:—

"By far the commonest error of the pre-"scriber, and one which most interferes with "his success, is the easy-going habit of "regarding all persons as alike, and recognis-"ing differences only in their diseases. . . .

"The farmer who would succeed in his "pursuits must not content himself with "making sure that he has sown good seed, "and according to the most approved methods: "he must go farther back, to take knowledge "of the nature of the soil with which he "has to deal, of the crops which it has "previously borne, and of the manures which "have been used. It is much the same with "us in the diagnosis and treatment of disease."

No one can doubt that were the temperaments carefully discriminated, treatment would become more certain, because more individual.

It may be hoped that in an age when the science of medicine has been so greatly advanced by minute physical examination of the different organs, Mr. Hutchinson's accusation that temperament, "unquestionably a real force, and one that we would most gladly recognize and estimate if we could," remains useless because it cannot be discriminated, may stimulate observers to study temperament as they have studied the heart or any other of the organs, and assign physical characteristics by which the different temperaments may be readily recognized.

Dr. Wilks (page 9) may well consider it singular that

"with one or two exceptions our teachers of

"medicine seem to have forgotten the doctrine "of temperaments which occupied so large "a part of the old schools of education."

Professor Laycock was no doubt one of the exceptions. He taught the doctrine enthusiastically, not only in the class-room but clinically, and no part of his professorial teaching made a deeper or more lasting impression on those who studied under him, or has had a greater influence on their practice.

"Chief among those to whom I allude stands "one to whom I have myself been greatly in-"debted—my first teacher of medicine, the late "Professor Laycock.

"With a power of insight which amounted "almost to genius, Dr. Laycock had applied "his mind to the study of the physiognomical "diagnosis of disease, and by long practice in "observations in this direction, he was enabled "sometimes to give opinions which astonished "those who were accustomed to more plodding methods of investigation.

"In a series of lectures delivered in 1861, and published in the following year in *The Medical* "Times and Gazette, he embodied the results of his experience.

"He believed that his rules of diagnosis were "to a large extent based upon peculiarities of "temperament, and he naturally gave great "attention to the correct classification of these "so-called fundamental states."—Mr. Hutchinson.

Our teachers of medicine, in avoiding, as they do, the apparently complex study of the temperaments, would do well to consider their responsibility to students and the science they teach.

In a recent important work on medicine, the article "Temperament" is contributed by a teacher of medicine in one of our schools, but he omits the bilious temperaWere distinctive descriptions of the temperaments authorised by the Collective Investigation Committee of the British Medical Association, as suggested (page 57), they would no doubt be immediately accepted by the profession, and with the best results. The patient's temperament would come to be named in every case, reliable observations would accumulate, and Temperament would occupy the important place in the science of medicine to which it is entitled; a place which physical examination, however minute, cannot occupy.

Such examination only makes known to what extent any of the organs has become invaded by disease. Temperament takes cognizance of the whole of the organization, and of the greater liability of nearly every person to disease of one of the four organs. It indicates individual, and therefore the most effectual treatment, influenced by the organic differences between men; and it renders more definite the important influence of the mind in disease, by teaching the natural association of certain mental with certain physical characteristics.

It is probably by the unwritten law of temperament that experienced physicians and surgeons have acquired the rapidity of judgment which they possess of the probable course of disease, and their power over it by treatment.

Professor Gairdner has well said :-

"An experienced observer has an instinct of divination, so to speak, by which the true character and the history of the organism may be read in the external features and physical characteristics, and this not only as to health

"and disease, but as to all the leading elements "of character."

This being "a popular outline," I have gone out of my way to call the attention of medical men to the fundamental need of standard descriptions of the temperaments, in the sanguine hope that among so many observers who are more or less familiar with the subject, some may be induced to revise those I have given, or supply others.

To enable observers to become practically familiar with the temperaments; to know the temperament of any one, and the mental qualities and traits of character naturally associated with it; I have arranged from scattered and scanty material, a scheme of the four pure temperaments, — the sanguine, the bilious, the lymphatic, and the nervous, — that their physical and associated mental characteristics

may be easily compared and readily remembered.

As definite mental characteristics have probably not been assigned to the four temperaments till now, the scheme should be regarded as only a wellconsidered endeavour to give precision to the subject, and more or less provisional till confirmed or corrected by other observers. I am hopeful, however, that it may prove a generally reliable guide.

The compound or mixed temperaments -physical characteristics of two or more of the pure temperaments in the same person-are described in Chapter VII.

They are far oftener seen than the pure temperaments; but the student of temperament must become practically familiar with the physical characteristics of the pure or standard temperaments, that he may be able to analyze and name the compound ones.

To show that the scheme of the four pure or standard temperaments (pages 77, 78, 79, 80) includes the physical characteristics assigned to them by others, I precede it by the best descriptions I have yet found in the works of the few English authors who appear to have observed for themselves.

THE SANGUINE TEMPERAMENT.

"The sanguine temperament is strongly "marked by a florid complexion, fair skin, blue "eyes, light hair, generally, and oftentimes red, "an animated countenance, bright red lips, an "active and easily excited circulation, muscular "fibres firm without rigidity, and elastic with-"out feebleness." — The Reciprocal Influence of Body and Mind, by Newnham, 1842.

"The sanguine man displays a pretty well developed figure, has a capacious cranium, biggish nose, broad chin and cheeks, massy, well set teeth, ruddy complexion, his limbs

"capacious, and as he advances in life he be"comes fat."—Professor Laycock in Medical Times
and Gazette.

"In this (the sanguine temperament), the "external appearances are the following: the "hair, soft and never much curled, is of a "pale colour, or from thence passing through "different shades to red; the skin is smooth "and white; the complexion ruddy; the eyes "commonly blue; the habit of body soft and "plump; after the period of manhood, dis-"posed to obesity, and at all times readily "sweating upon exercise; the strength of the "whole body is moderate, and the mind sen-"sible, irritable, cheerful, and unsteady."—Dr. Cullen, 1779.

Of Sir John Forbes, whose temperament was chiefly sanguine, Professor Laycock says:—

"He had an ample brain, and in youth had blue eyes, a bright florid complexion, and was THE FOUR PURE TEMPERAMENTS. 67

"full of spirits, frank and joyous, with a certain "impetuosity of temper."—Medical Times and Gazette, 1862.

"A bright, blue-eyed, rosy-cheeked, curly"headed youth" (sanguine temperament).—

Mr. Galton, F.R.S.

THE BILIOUS TEMPERAMENT.

"The choleric (bilious) temperament is marked by black curling hair, dark eyes, a swarthy and at the same time ruddy complexion, a thick rough hairy skin, and a strong full pulse."—Dr. Pritchard, F.R.S., Article Temperament, in Cyclopædia of Practical Medicine.

THE LYMPHATIC TEMPERAMENT.

"The phlegmatic (lymphatic) temperament is distinguished by light, sandy, or white hair, light grey eyes, a pallid, unhealthy white-increase of skin, which is almost bereft of hair, small bloodvessels, a weak, slow pulse, cold

"surface, general defect of energy in the func-"tions both of animal and physical life."—Dr. Pritchard.

"As usually seen in this country, it (the "lymphatic temperament) is characterised by a "large person, flaccid muscles, and more or less "pallor of countenance—in short, a degenerate "John Bull."

"These are the slow-moving, pale, flaccid "men of the lymphatic temperament."

-Laycock.

Mr. Starkweather quotes a graphic description by Mr. Fred Douglas, of the manner of his reception by President Lincoln, probably "lymphatic," certainly "slow-moving":—

"I was politely ushered into his reception "room, and as he saw me approaching he began to draw up his feet preparatory to rising; "ere long commenced to rise, and as I ad-"vanced, he continued to rise."

Mr. Starkweather adds:-

"This affords a striking contrast to the "movements of an active, nervous man, who "would have risen on to his feet the moment he made up his mind to do so."—"The Law of Sex," page 216.

THE NERVOUS TEMPERAMENT.

"When the characters of the nervous temperament predominate, as a slight figure, small features and limbs, thin, elegantly formed nostrils, thin lips, and pointed chin."

—Laycock.

"In the nervous temperament the eye is "almost always vif and restless, the forehead "lofty, and the whole head disproportionately "large compared with the face."—British and Foreign Medical Review.

"Figure small and wiry, face mobile, fea-"tures small and delicate, great activity of mind "and body, dyspeptic, and with highly strung "nervous system. Individuals of this tempera-"ment are specially liable to nervous diseases " of all kinds." - Medical Diagnosis, by J. Graham Brown, M.D., 1883.

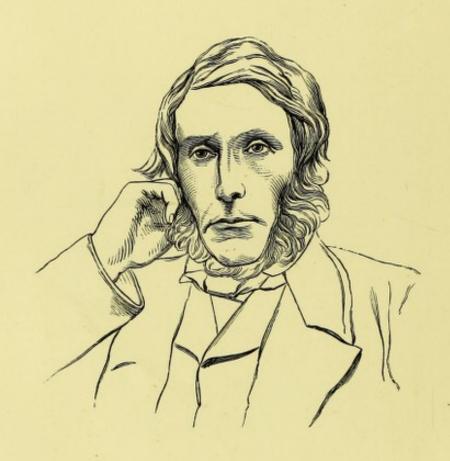
"The nervous or mental temperament may "be known by the sharp, quick, intelligent "eye, well-formed brain, and V-shaped pale "face, with small bones and neatly-formed "body. This is the most active, finely strung, "and delicate of all the temperaments."-Anonymous Medical Work.

"Whilst the flow of ideas is rapid, and the "expression of them prompt, the muscular "movements are remarkable for their energy "and rapidity, so that the limbs and body "move quickly and impulsively."-Laycock.

THE MELANCHOLIC TEMPERAMENT.

The melancholic, or, as its name implies, the black bile temperament, formerly held place as one of the four pure tem-





THE MELANCHOLIC FACE.

peraments, but is a long-faced, hollow-cheeked compound of the bilious and nervous temperaments, and is characterized by black hair, dark and generally large eyes, a dull, dark complexion, darker in some, under the lower eyelids, the face tapering somewhat to the chin, and the neck long.

"The well-known Puritan features, black, straight hair, hollowed cheeks, and sallow complexion."—Mr. Galton, F.R.S.

Whatever the colour of the hair, eyes, or complexion; the long tapering face, with depressed cheeks, large eyes, and long neck, give, more or less, the same air of melancholy.

The few extracts that follow are the most striking references to the mental characteristics of the temperaments that I have met with.

THE SANGUINE AND BILIOUS TEMPERA-

"Not sanguine and diffusive he,

"But biliary and intense."

-Carlyle.

"i.e., the circulation is readily influenced by mental changes, and they readily blush, laugh, weep, sigh, sympathise. But the emotion, though prompt and violent, soon ceases. He tells you that his temper is soon up and soon over."

"In all these respects the differences between the excitable (sanguine) and the choleric (bilious) temperament are clearly marked. In the choleric man the circulation is comparatively little disturbed by emotion, and the resentment or other emotion is more abiding."—Laycock.

"As Micheline and Jeanne, Mesdames Ange" and Lina Munte reproduce that eternal con-

"trast of the femme blonde and the femme brune,

"the one simple and confiding, the other

"passionate, jealous, revengeful, unscrupulous."

—Notice of a French Play.

"The sanguine by a happier temperament are rendered cheerful and free from care."

THE LYMPHATIC TEMPERAMENT.

Of those of the lymphatic temperament, Dr. Southey says:—

"Their memories are good, their reasoning powers are considerable, and their judgment sound and logical. Common sense and straightforward conduct characterise them in their dealings with their fellow creatures. Socially, they are seldom the best company, but their sterling qualities make them the best friends."

This is a contrast to the description quoted and accepted by Mr. Starkweather in the appendix to this chapter.

THE NERVOUS TEMPERAMENT.

Of the nervous temperament Professor Laycock says:—

"There is greater susceptibility to all impressions, finer susceptibilities, greater rapidity of action, of ideas, and of speech; in the expression of the feelings and ideas greater vividness of the imagination."

THE MELANCHOLIC TEMPERAMENT.

"The melancholic temperament is characterised by inexcitability, or, at least, inactivity, and by gloomy, disparaging ideas as to self, children, country, which take the place of the confidence and sanguine anticipations of the nervous and sanguine temperaments."

-Laycock.

"The Puritan's character is joyless and "morose; he is most happy, or, to speak "less paradoxically, most at peace with himself "when sad. It is a mental condition cor- "related with the well-known Puritan features,

"black straight hair, hollowed cheeks and sallow complexion (melancholic characteristics). A bright, blue-eyed, rosy-cheeked, curly-headed youth (sanguine characteristics) would seem an anomaly in a Puritanical assembly."—Mr. Galton, F.R.S.

The following sketch shows the natural action of the sanguine man in daily life.

THE SANGUINE MAN.

The man of a purely sanguine temperament, the hair more or less red, the eyes blue, and the complexion florid, is warm-blooded, warm-hearted; his blood soon boils, soon cools; his heart rules his head; action precedes thought. In youth it is a word and a blow, then sorrow. He has often to apologize for words spoken in haste.

I know two partners in business, one sanguine, the other bilious. The bilious has often to throw cold water on the

projects of the sanguine, who almost invariably fires up and says too much, which makes him for a short while miserable, downcast, and meekly ready to yield anything.

He is useful however. His sanguine temperament helps to dispel the dark views of events from temporary troubles which his bilious partner would indulge in.

The sanguine man has great expectations. His disappointments are short-lived; his forecasts always sunny. His views are large and liberal. The law is not half summary enough for him. He would often dispense with both judge and jury.

He is loved by the young; enters heartily into their sports and games, and laughs more merrily than the merriest. This therefore might well be called the jolly temperament.

THE SANGUINE TEMPERAMENT.

MENTAL CHARACTERISTICS.	1. Impulsive. Buoyant and cheerful. Favourable conclusions thoughtlessly drawn. 2. Excitable. Readily provoked. Easily reconciled. Emotional. 3. Ardent in everything. Not persistent. 4. Not enduring in work. 5. Muscular pursuits preferred to intellectual. 6. Equally happy in the pursuit of little as of great ends. More happy in pursuit than enjoyment. 7. Firm, outspoken speech. Not minutely informed.	* The same in the Sanguine, the Bilious, and the Lymphatic.
PHYSICAL CHARACTERISTICS.	1. (Hair. Red, or reddish. 2. \(\begin{align*}{c} \\ \\ \\ \end{align*} \) Eyes. Blue. 3. \(\begin{align*}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	* The same in the Sanguine,

THE BILIOUS TEMPERAMENT.

(THE CHOLERIC, FROM CHOLER = BILE.)

MENTAL CHARACTERISTICS.	 Not impulsive. Serious. Conclusions thoughtfully arrived at. "Passionate, jealous, revengeful, unscrupulous" (page 74). In business matters, cool and wary. Eager, earnest, persistent. Enduring in work. 	 Susiness or gainful pursuits preferred to muscular or intellectual, but able to excel in all. Happy in the pursuit and attainment of wealth, power, and family welfare. Decided speech. Always ready, and informed.
PHYSICAL CHARACTERISTICS.	1. (Hair. Black. 2. $\stackrel{\rightleftharpoons}{=}$ Eyes. Black or dark brown. 3. $\stackrel{\frown}{\circ}$ Complexion Dark or darkish. (colour of the face). "Pale olive." Laycock.	4. Face. Square. 5. Face. Outspread. 6. Face. Square. 7. Build. Thick set.

* The same in the Sanguine, the Bilious, and the Lymphatic.

THE LYMPHATIC TEMPERAMENT (PHLEGMATIC).

MENTAL CHARACTERISTICS.	1. Not impulsive. Slow. Heavy. Conclusions thoughtfully arrived at.	2. Not excitable. Not readily provoked. Forgives, but never forgets.	3. Persistent, not ardent.	4. Enduring in work. A plodder in business.	5. Muscular pursuits avoided.	6. Happy from personal comforts and indul-	gence.	7. Slow manner of speech. Always informed.
PHYSICAL CHARACTERISTICS.	Hair. Fair brown (flaxen). Sandy white. Thin.	Eyes. Brown grey (green or light hazel). Thinly coloured. The white often into great proportion. Lustreless.	ble.	Complexion Colourless; dense. (colour of the face).	(Face. Square.	Nose. Outspread.	Neck. Short.	(Build. Thick set.
	-	8		3.	+	i	9.	7.

* The same in the Sanguine, the Bilious, and the Lymphatic.

THE NERVOUS TEMPERAMENT.

	PHYSICAL		CHARACTERISTICS.	MENTAL CHARACTERISTICS.
	Hair. Light	ght brown.	3	1. Impulsive. Animated. Rapid. Conclusions so hastily drawn that they are often
Solour Colour	2. $\overrightarrow{9}$ Eyes. Grey. 3. \overrightarrow{O} Complexion (colour of the	e face)	Pale. Clear.	2. Excitable. Readily provoked. Reconciled immediately. Imaginative. Sensitive. Particular. Fastidious.
	Face. Ta	pers to a no broad or high	Face. Tapers to a narrow chin from a broad or high forehead.*	3. Irresolute. Persistent after final decision. 4. Enduring in work; will never give in. In
Srm.	Nose.	Narrow.		5. Intellectual and muscular pursuits enjoyed.
E	Neck.	Long.		6. Happiness from whatever pleases the senses
	Build. SI	ight. Slim. Often tall and	Slight. Slim. Never corpulent. Often tall and extremely thin.	7. Speech rapid, often very rapid. Frequently undecided. Precision gives place to fancy.

* The for head being large compared with the rest of the face, the Nervous is sometimes called the Cerebral Temperament.

I should state that the characteristics which I have assigned to the temperaments are taken from the people of our own country, and therefore may not apply to those of other countries, the physical characteristics and the influences that modify the mental ones being more or less different.

The descriptions of the temperaments in English works were, till fifty years ago, nearly all taken from Hippocrates and his followers, and therefore no doubt describe the temperaments of the Greeks; and since then they have with scarcely an exception been taken from a French source, Richerand's Physiology,* and therefore,

^{*} As an appendix to this chapter I have given the descriptions of Richerand, and also the descriptions of which Mr. Starkweather says :-

[&]quot;Having found in a Spanish volume by Cortès what I consider as satisfactory a description of these temperaments as I have seen in any language, I translate his delineations rather than attempt an original one."-The Law of Sex.

no doubt, describe the temperaments of the French.

Dr. Wilks says:—

"It is remarkable how few have studied the different temperaments of Englishmen, most medical writers having been content to take the different varieties as described by Hippocrates as existing among the Greeks."—Sanitary Record, 1876.

"Not only may the inhabitants of ancient "Greece and Rome be different from those "of England, but in our own country these "may have altered in the lapse of centuries."

—Guy's Hospital Reports, 1869.

APPENDIX

To Chap. iv.

CONTAINING

1. THE DESCRIPTIONS OF THE TEM-PERAMENTS AND THE MORE IM-PORTANT OF THE PERSONAL EXAMPLES AND REMARKS BY THE FRENCH PHYSI-OLOGIST RICHERAND*;

AND

2. THE DESCRIPTIONS OF THE TEM-PERAMENTS BY A SPANISH AUTHOR, CORTÈS, TRANSLATED AND ADOPTED BY MR. STARKWEATHER.

These French and Spanish descriptions of the temperaments show how, in other countries besides our own, authors have

* Elements of Physiology, by A. Richerand, Professor of the Faculty of Medicine, of Paris, etc., translated from the French. Revised, with notes and a copious Appendix, by James Copland, M.D., etc. Second Edition. 1829.

not realized the fundamental necessity of assigning physical characteristics with sufficient fulness and precision to enable observers to distinguish the different temperaments.

Richerand omits the colour of the eyes from his descriptions, assigns only one physical characteristic to the nervous temperament, not even one to the melancholic temperament, and loosely describes characteristics as "good," "moderate," "tolerable."

The descriptions by Cortès are similarly characterized by want of precision, and therefore, like Richerand's, are not practically available.

Richerand has given the supposed relation between the characters of many illustrious men and their temperaments; but as their physical characteristics are not given, there is no proof that their temperaments are correctly named. DESCRIPTIONS OF THE TEM-PERAMENTS BY THE FRENCH PHY-SIOLOGIST RICHERAND.

"We give the name of temperaments "to certain physical and moral differences "in men which depend on the various "proportions and relations among the parts "that make up their organization, as well "as upon different degrees in the relative "energy of certain organs."

"The predominance of any particular "system of organs modifies the whole "economy, and has no less influence on the "moral and intellectual than on the physical "faculties."

OF THE SANGUINE TEMPERAMENT.

Richerand.

"the blood through every part are of predomi"nant activity, the pulse will be sharp, frequent,
"regular, the complexion ruddy, the countenance
"animated, the shape good, the form softened,
"though distinct, the flesh of tolerable consistence,
"and moderate plumpness, hair fair and inclining
"to chestnut; the nervous susceptibility will be
"lively and attended with rapid successibility,*
"that is to say, that being easily affected by
"the impressions of outward objects, men of
"this temperament will pass rapidly from one
"idea to another; conception will be quick,
memory prompt, the imagination lively; they

^{*} The physical characteristics by which Richerand and Cortès have distinguished the temperaments are here put in italics that they may be readily compared with those given in the scheme, from which, however, as already stated, characteristics are excluded that cannot be seen.

"will enjoy a health seldom interrupted by disease, and all their diseases, and these slight, will have their seat principally in the circulatory system, and be modified by the temperation."

"The ancients gave the name of Sanguine to "this disposition of body; they considered it as "produced by the combination of warmth and "moisture, and had very correctly perceived that it existed in the young of both sexes, was heightened by the spring, the season which has justly been compared to youth, calling that age the spring-time of life.

"The physical traits of this temperament are to be found in the statues of Antinous and the Apollo of Belvidere. Its moral physiognomy is drawn in the lives of Mark Antony and Alcibiades. In Bacchus are found both the forms and the character. But why seek amongst the illustrious men of antiquity, or among its gods, the model of the temperament I have been describing, whilst it is so easy to find it among the moderns? No one, in my opinion, exhibits a more perfect type of it than the Marshal

"Duke of Richelieu, that man so amiable, "fortunate, brave in war, light and inconstant "to the end of his long and brilliant career.

"Inconstancy and levity are, in fact, the chief attribute of men of this temperament; they are good, generous, feeling, quick, impassioned, but fickle. Excessive variety appears to be to them a necessity as much as an enjoyment."

In the foregoing description of the sanguine temperament seven physical characteristics are given, but only two of them, the complexion ruddy, hair fair and inclining to chestnut, are practically available to recognize the temperament at sight; and the mental traits associated with the physical ones are chiefly those of the nervous temperament; easily affected by the impressions of outward objects; rapidly passing from one idea to another; conception quick, memory prompt; imagination lively. (See chap. vi., "The Nervous Temperament.")

OF THE BILIOUS TEMPERAMENT.

Richerand.

"If sensibility which is vivid and easily "excited, can dwell long upon one object; if "the pulse is strong, hard, and frequent, the "subcutaneous veins prominent, the skin of a "brown inclining towards yellow, the hair "black, moderate fulness of flesh but firm, "the muscles marked, the form harshly expressed; "the passions will be violent, the movements " of the soul often abrupt and impetuous, the "character firm and inflexible. Bold in con-"ception of a project, constant and indefatigable "in its execution, it is among men of this "temperament we find those who in different "ages have governed the destinies of the "world: full of courage, boldness, and activity, "all have signalised themselves by great virtues "or great crimes, and have been the terror or "admiration of the universe.

"Such were Alexander and Julius Cæsar,

- "Brutus, Mahomet, Charles XII., the Czar Peter, Cromwell, Sixtus V., Cardinal Richelieu.
- "As love is in the sanguine, so ambition is in the bilious the governing passion. This temperament is further characterised by the premature development of the moral faculties. Scarcely past their youth, the men I have named projected and carried out enterprises which would have been sufficient for their fame."

As Richerand's description of the physical temperament of the bilious is loose and incomplete,—the colour of the eyes even being omitted,—and he has given none of the physical characteristics of the great men to whose lives he has referred, it is doubtful whether he was warranted in characterizing the temperament of these celebrities as bilious.

"If all the characteristics assigned to the bilious temperament are carried to the highest

"degree of intensity, and to this state is added great susceptibility,—men are irascible, impetuous, violent on the slightest occasions. Such Homer describes Achilles and some others of his heroes.

"The diseases to which the bilious are subject, involve either as their principal characteristic, as accessory circumstances, or as complication, the derangement of the action of the hepatic organs, joined to changes of composition in the bile."

OF THE LYMPHATIC TEMPERAMENT.

Richerand.

"If the proportion of the fluids to the solids "is too great, this superabundance of the "humours, which is constantly in favour of "the lymphatic system, gives to the whole body "considerable bulk, determined by the develop-"ment and repletion of the cellular tissue. "The flesh is soft, the countenance pale, the hair "fair, the pulse weak, slow, and soft, the form

"rounded and without expression, all the vital actions more or less languid, the memory treacherous, the attention not continuous.

"Men of this temperament, to which the ancients gave the name of pituitous, and which we should call lymphatic, because it depends really on the excessive development of this system, have in general an insurmountable inclination to sloth, averse alike to labours of the mind and body: accordingly we are not to wonder if we find none of them among Plutarch's illustrious men. Little fitted for business, they have never exercised great empire over their fellow-creatures; they have never changed the face of the globe by their negotiations or their conquests.

"One of the friends of Cicero, Pomponius "Atticus, whose history Cornelius Nepos has "left us, conciliating to himself all the factions "which tore the Roman Republic to pieces in "the civil wars of Cæsar and Pompey, may be given as the model of it.

"Among the moderns, the easy Michel Montaigne, all of whose passions were so moderate, "who reasoned on everything, even on feeling, was truly pituitous. But in him the predominance of the lymphatic system was not carried so far but that he joined to it a good deal of nervous susceptibility.

"In the lymphatic, from the excess of watery particles in the fluid, which should carry everywhere heat and life, the circulation goes on slowly, the imagination is weak."

OF THE NERVOUS TEMPERAMENT.

Richerand.

"The property by which we are more or "less sensible to impressions on our organs, "weak in the lymphatic, almost nothing in "athletes, moderate in those of sanguine temperament, rather quick in the bilious, constitutes by its excess the nervous temperament;
it is seldom natural or primitive, but commonly
acquired, and depending on a sedentary and
too inactive life, etc.

"This temperament shows itself in the

"emaciation, in the smallness of the muscles, "in the vivacity of the sensations, in the "suddenness and mutability of the deter-"minations and judgments."

The physical characteristics of the nervous temperament in the scheme—face tapering from a high or broad forehead, small features, long neck, a slight figure—are, judging from portraits, probably as often seen in France as in this country; yet Richerand has assigned only one physical characteristic, "smallness of muscles," to the temperament.

In the following paragraph he has obviously confounded the nervous temperament with nervousness, which is altogether a departure from the healthy manifestation of the temperament (chap. ix.):—

"The nervous temperament, like the melan-"cholic, is not so much a natural constitution "of the body as the first stage of a disease. "This temperament, like the nervous affec-"tions which are the result of it, has never "shown itself but among societies brought to "that state of civilisation in which man is the "farthest possible from nature.

"The two most remarkable men of the "eighteenth century, Voltaire and the great "Frederick, may be given as instances of the "nervous temperament; and the history of "their brilliant and agitated life shows suffi-"ciently how much the circumstances in which "they lived contributed to develop their native "dispositions."

OF THE MELANCHOLIC TEMPERAMENT.

Richerand.

"The exceedingly multiplied varieties of this temperament called by the ancients the melancholic; the diversity of accidents that may bring it on, such as hereditary disease, long grief, excessive study, etc., justify the

"opinion which Clerc has proposed in his "natural history of man in a state of disease, "where he considers the melancholic temperament less as a primitive and natural constitution, than as a diseased affection, hereditary
or acquired.

"Distrust and fearfulness, joined to all the "disorders of imagination, compose the moral "character of this temperament.

"It is extremely difficult to delineate the "melancholic temperament in a general or abstract manner. Though the ground-work of the picture remains always the same, its numerous circumstances give room for an infinite number of variations. It is better therefore to have recourse to the lives of illustrious men who have exhibited it in all its force.

"Tasso, Pascal, J. J. Rousseau, Gilbert, "Zimmerman, are remarkable among many "others, and deserve by their just celebrity "to fix our consideration."

Richerand gives particulars of their lives which show that these celebrated men had morbid minds.

He thus concludes his remarks on Rousseau:—

"His history is a proof, beyond reply, that "the melancholic temperament is less a peculiar "constitution of the body than a real disease, "of which the degrees may infinitely vary from "a mere originality of character to the most "decided mania."

As he has given no physical characteristics by which the melancholic temperament may be distinguished, and has left unnoticed the features of the eminent men he has referred to as of that temperament, it cannot be accepted that he has correctly assigned their temperament.

Although very few have acknowledged

their indebtedness to Richerand's descriptions, they are the source of most of those that have been given by English authors since their publication in this country; and by omitting precise physical descriptions by which the temperaments may be known, have probably contributed largely to the prevalent assignment of mental characteristics to temperament, without specifying, probably without thought of, any particular temperament.

2. DESCRIPTIONS OF THE TEM-PERAMENTS BY CORTES,

Translated and Adopted by Mr. Starkweather.

"Having found in a Spanish volume by "Cortès what I consider as satisfactory a "description of these temperaments as I "have seen in any language, I translate "his delineations rather than attempt an "original one."—The Law of Sex, 1883.

THE SANGUINE TEMPERAMENT.

Cortès.

"The Sanguine temperament, characterised by "predominance of the lungs, heart, arteries, and "veins.

"Persons of this class have a broad chest, a "large heart, and have easy and ample respiration. "Their veins are superficial and well-developed; "they are tall, with chestnut or light hair, white "and rosy complexion, eyes and countenance ani-

"mated: they have considerable natural warmth, "and moderate appetite. They eat and digest "with rapidity, and sleep with ease; they are, "consequently, strong and happy.

"Their ailments are usually of an inflam-"matory nature, rapid in their course, and ter-"minating favourably.

"If there be a good cerebral development "they have an excellent memory, active imagi"nation, and fondness for labour that employs "the understanding; but they are not given to "meditation. They are benevolent and happy; "their anger is easily kindled, but it as speedily "vanishes; all their passions are lively, incon"stant, and are sure to present marked defects "or brilliant qualities. If this temperament be "united with the bilious in an individual, he "possesses the advantages and disadvantages of "both, modified in a certain degree, however, "by the combination."

THE BILIOUS TEMPERAMENT.

Cortès.

"The Bilious temperament, characterised by "predominance of the stomach, intestines, liver "and spleen.

"Those who have these organs largely de"veloped, and more active than other parts, are
"daring, of a fixed and penetrating expression of
"eye, with prominent muscles, and great vivacity
"of movement.

"They are of medium stature, and have a "dark skin, dry, warm, and hairy, characterised by veins that stand out in bold relief. Their hair is black, or dark chestnut, and falls early.*

"They digest food easily, and endure fasting."

These sleep lightly, and require comparatively it little of it.

"They usually devote themselves to the accom-

* "This I have not found confirmed by observa-"tion."—Starkweather. "plishment of a single object, have great constancy of purpose, a powerful imagination, and are apt to ride hobbies. They are inclined to be equivered egotistical, suspicious, and to exaggerate their fears and wrongs; they are indefatigable in their enterprises, and most persistent, zealous, passionate, and revengeful. They are especially subject to disorders of the stomach, or intestines, and above all, of the liver, which makes them melancholic.

"This temperament has furnished the world with tyrants, conquerors, benefactors to humanity, and legislators."

THE LYMPHATIC TEMPERAMENT.

Cortès.

"The lymphatic temperament characterised by the predominance of the cellular tissue and white fluid, or lymph.

"Those of this temperament have an abun-"dance of white corpuscles, their muscles being "as it were, infiltrated with these humours, but "not rendered prominent thereby.

"Their lungs, heart, and arteries are but "poorly developed, and their blood is less "fluent than in the other temperaments.

"They are subject to corpulency, but it is "not healthy fat.

"With the least sickness they become ex"tremely thin, and any occupation requiring
"some degree of activity they find themselves
"unsuited for, and they are soon disheartened
"and depressed; their fatness vanishes, leaving
"them much emaciated. They generally waste
"away only in those parts most exercised.

"They present a pallid and swollen appear"ance; their eyes are delicate and expressionless;
"their lips are ample; their hair is light or
"chestnut, and lies sleek and flattened to the
"head.

"They appear to be unnaturally fat, and there is no consistency in their skin or flesh.

"Thy eat little and digest but poorly: they sleep long and soundly. They are slow and heavy in their movements. Pleasures of

"any kind, even those of love, scarcely arouse "them: they are wanting in intelligence: "they have no memory or penetration: they "are lazy, insensible to the charms of the "arts and sciences. They are well-nigh passion-"less. They have, however, some judgment; "they are easily vexed, but soon become "placid again. They soon forget wrongs and "insults, which in fact make but slight im-"pression on their minds. They are good, "affable, benevolent, indifferent to most that "is transpiring around them. No great sacri-"fices should be anticipated from them. They "are usually quite happy, for they may be "said merely to vegetate."

The mental traits here attributed to those of the lymphatic temperament in Spain make them all imbeciles, but and must surely be greatly overdrawn. They may be compared with those in the extract from Dr. Southey (page 73), and with those in the scheme of the four temperaments (chap. iv.)

Mr. Starkweather says: "Not one in "a hundred probably could be found so "dull as here described."

THE NERVOUS TEMPERAMENT.

Cortès.

"The nervous temperament characterised by cerebral predominance and known by a high broad head, and a strong inclination to mental labour, great vivacity of feeling, an active imagination, and a rapid succession of ideas, which seem to emanate spontaneously.

"The bodies of persons of this temperament are of slender form, sometimes dry, their muscular system is frail, and of more than a normal thinness. Their skin is slightly flushed, generally fine, and very sensitive; they have a brilliant eye, but with a timid expression.

"All their functions change easily, and since they are of strong emotions they are much

"inclined to love. Their sleep is light and "disturbed by dreams: their ailments soon "become complicated with cerebral symptoms, "and the head generally becomes the seat of "the disease."

Having no more precise descriptions than Dr. Laycock's, or the foregoing, to guide him, Mr. Hutchinson was fully justified in telling his professional brethren; all of them no doubt thinking that they knew the different temperaments; at any rate speaking and writing of them as if they did:-

"As yet I fear we must say that the labours " of the physiognomist and those of the student " of temperament have been alike disappointing. "Whoever will set himself the task of "attempting to classify a given number of "individuals according to their temperaments, "will, I think, soon find himself baffled."

CHAPTER V.

OBSERVATIONS ON THE SCHEME OF THE FOUR TEMPERAMENTS.

Colour characteristics.—Colour of the hair and eyes.—Change of colour of the hair and eyes.—Colour of the complexion.—Form characteristics.—Assignment of the same form characteristics to the Sanguine, the Bilious, and the Lymphatic temperaments.—The form characteristics of the Nervous temperament.—The Sanguine, the Bilious, and the Lymphatic physically powerful temperaments.—The Nervous a gentle, imaginative, and intellectual temperament.—Probably an increasing temperament.—The mental characteristics of the scheme.

THE physical and the associated mental characteristics of the four pure temperaments being the very foundation

of the doctrine, their mere enumeration and arrangement, as in the scheme, seemed insufficient, and I have therefore in this chapter considered them as fully as appeared necessary.

THE PHYSICAL CHARACTERISTICS OF THE SCHEME are:-

- Colour of the hair.
 Colour of the eyes.
 Colour of the complexion.

- 4. Form of the face.

- 7. Build of the body.

5. Form of the nose.

6. Length of neck.

Form characteristics.

COLOUR CHARACTERISTICS.

I. Colour of the Hair.

In the "Life History Album" of the British Medical Association, recorders are asked to state whether the hair is—

- 1. Fair brown (flaxen).
- 2. Light brown.
- 3. Brown.
- 4. Dark brown.
- 5. Fair red (golden, sandy).
- 6. Red.
- 7. Dark red (chestnut, auburn).
- 8. Jet black;

and regarding these as temperament colours, I have assigned four as characteristics of the pure temperaments, and four as compound characteristics (chap. vii.)

PURE COLOUR CHARACTERISTICS.

(The Hair.)

- 1. Red . . . Sanguine characteristic.
- 2. Jet black . . Bilious characteristic.
- 3. Fair brown . Lymphatic characteristic. (flaxen)
- 4. Light brown. Nervous characteristic.

COMPOUND COLOUR CHARACTERISTICS.

(The Hair.)

- 5. Dark red. . Sanguine and Bilious characteristic.
- 6. Fair red . . Sanguine and Lymphatic characteristic.
- 7. Brown . . . Sanguine and Nervous characteristic.
- 8. Dark brown . Bilious and Lymphatic characteristic.

Mr. Galton ("Inquiries into Human Faculty and its Development," page 6), says:—

"Englishmen are now a fair and reddish race, as may be seen from the diagram, taken from the Report of the Anthropometric Committee to the British Association in 1880, and which gives the proportion in which the various colours of hair are found among our professional classes.

"I take the professional classes because they correspond with the class of English worthies better than any of the others from which returns have been collected. The diagram, however, gives a fair representation of other classes of the community. For instance, I have analysed the official records of the very carefully selected crews of H. M. S. Alert and Discovery, in the Arctic Expedition of 1875-6, and find the proportion of various shades of hair to be the same among them as is shown in the diagram. Seven-tenths

"as light, fair, fresh, ruddy or freckled, "and the same proportion had blue or grey "eyes."

2. Colour of the Eyes.

The colours given in "The Life History Album" are

- 1. Dark blue.
- 2. Blue.
- 3. Grey.
- 4. Dark grey.
- 5. Brown grey (green, light hazel).
- 6. Brown.
- 7. Dark brown (black);

and of these I have assigned four as characteristics of the four pure temperaments and three as compound characteristics.

OBSERVATIONS ON THE SCHEME, 113

PURE COLOUR CHARACTERISTICS.

(The Eyes.)

- 1. Blue . . . Sanguine characteristic.
- 2. Dark brown . Bilious characteristic. (black)
- 3. Brown grey. Lymphatic characteristic. (green, light hazel)
- 4. Grey . . . Nervous characteristic.

COMPOUND COLOUR CHARACTERISTICS.

(The Eyes.)

- 5. Dark blue . Sanguine and Bilious characteristic.
- 6. Brown . . . Bilious and Lymphatic characteristic.
- 7. Dark grey . Bilious and Nervous characteristic.

Change in the Colour of the Hair and Eyes.

Mr. Galton, in the "Record of Family Faculties," says:-

"The hair of children darkens considerably "as they grow older," and :-

"The colour of the eyes is more persistent "throughout life than that of the hair."

Mr. Froude says of Carlyle's eyes that "they became lighter late in life."

In the "Life History Album" it is said :-

"The eyes of infants at birth are always "dark blue, but it should be observed at what "period after birth their colour begins to "change. This generally occurs within a few "days."

Professor Laycock says:-

"Fair hair, blue eyes, and florid complexion usually go together; but I have met with persons having these characteristics in early life whose hair turned dark in later years."

As the colour of the hair and the eyes very seldom changes after the age when the character has become formed, conclusions as to the association of mental characteristics and traits of character with their colour in manhood, are not likely to be wrong.

3. Colour of the Complexion.

Neither in the "Life History Album," nor the "Record of Family Faculties," is inquiry made as to the natural complexion, and although it has always been considered a leading characteristic

of temperament, and is important in medicine, being altered in many diseases, I have not succeeded in finding any complete account of the complexions.

Mr. Hutchinson enumerates several:-

"It is easy to apply with tolerable accuracy such words as blonde, fair, dark, brunette, sallow, pale, florid, clear, muddy, and the like, and these and many others are epithets applicable to the complexion."—The Pedigree of Disease, page 6.

The complexion-colours assigned in the scheme to the sanguine, the bilious, and the lymphatic temperaments, have been generally accepted, but the complexion of the nervous temperament has not yet been established; the colour given in the scheme—pale and clear—being from my own observation only.

I have limited complexion to the

colour of the face, but it is not always used in the same limited sense; dark

colour of the eyes and hair.

Albert Dürer names the four temperaments "The Four Complexions," and Mr. Hutchinson says:—

and fair complexion often including the

"In complexion we include the colour of the hair and eyes, the state of the skin as regards thickness, thinness, or transparency, and the various degrees of freedom of distribution of blood in the capillaries of the face.

"Temperament, however, although to a large extent confessedly indicated by complexion, is generally held to include something more. If it did not, I fear we should find it but a sorry basis upon which to build a knowledge of the vital peculiarities of the individual."

"Something more" will be found in its form characteristics.

FORM CHARACTERISTICS.

4. Form of the Face.

Hitherto, form characteristics have scarcely been noticed by authors in their descriptions of the temperaments, but the forms of the face are as different and as striking, and certainly are more permanent, than the colours of the hair, eyes, and complexion; and I have therefore endeavoured to classify them for practical guidance, and to assign their associated mental characteristics.

A square face is assigned in the scheme to the sanguine, the bilious, and the lymphatic temperaments, and a tapering one to the nervous temperament.

By a square face is meant one Henry the Eighth like—the sides parallel.



STEELE.

Square Face, Nose Outspread, Short Neck, Thick-set.

See Scheme, Chap. iv.



"I am a little unhappy in the mould of my face, which is not quite so long as it is broad."—The Spectator, No. 17.

"That thick-set, square-faced, black-eyed, "little Irish boy."—Of Steele, by Thackeray, in "English Humorists."

"The jowl is strong and square, and the "chin is heavy. The weak, 'vanishing'" (tapering and nervous) "form being very "uncommon." — Captain Burton's "Summer in "Iceland."

5. Form of the Nose.

An outspread nose is assigned to the sanguine, the bilious, and the lymphatic temperaments, and a narrow one to the nervous.

Not many of the faces of the square type are so strikingly square as Steele's is seen to have been, and the tapering face may taper only slightly, but it must do so from a high or broad forehead; not, as sometimes seen, from high cheekbones—the forehead small. As with the square and tapering faces of the four pure temperaments, so it is with the other characteristics. The nose may be more or less outspread; the neck more or less long; the colour of the hair, eyes, and complexion, only a near approach to that of the standards.

6. Length of Neck.

In the scheme, a short neck characterises the sanguine, the bilious, and the lymphatic temperaments, and a long neck the nervous temperament.

Dr. Pritchard quotes a description of the melancholic temperament by a German author, who says:—

"Persons of this temperament are tall, have "long necks."

I have no note of any other mention

of length of neck as a temperament characteristic, but observation has convinced me that its place in the scheme as a chief characteristic of the nervous temperament is fully warranted.

The first day that I was struck by its being a fundamental characteristic of the nervous temperament, I walked leisurely from Charing Cross to St. Paul's, observing faces all the way; and having seen no exception to its association with the accepted characteristics of the temperament, I was congratulating myself on the proof of the new observation, when near the end of my walk I saw a gentleman walking slowly towards me having a broad forehead, the face tapering to a narrow chin, small features, yet, seemingly, a short—very short—neck.

Disheartened, I was about to discard the new view, when on his nearer approach I saw that chronic asthma had drawn his shoulders up, and shortened his once long neck.

The seeming exception proved the rule.

Unusual length of neck is not uncommon, but adds nothing, I think, to the ordinary manifestation of the nervous temperament.

Beard or dress will often be in the way, and prevent even a practised observer from seeing whether the neck is short or long. He will have found, however, that it is always short when the face and features are wide.

7. The Build of the Body.

Heavy, or thick-set, in the sanguine, the bilious, and the lymphatic, and slim in the nervous. Assignment of Form Characteristics.

In the scheme, the same form characteristics;

Square face,
Outspread nose,
Short neck,
Heavy build,

are assigned to the sanguine, the bilious, and the lymphatic temperaments, and four others, as opposite as possible;

> Tapering face, Narrow nose, Long neck, Slim build,

to the nervous temperament.

By this important generalization, which may, I hope, gain the concurrence of other observers, observation of the physical characteristics of the four temperaments acquires both method and simplicity; the sanguine, the bilious, and the lymphatic temperaments being made to differ only in their three colour characteristics.

There is more however to commend the generalization than its facilitating, by method and simplicity, the recognition of the different temperaments.

It suggests a relation between the form characteristics of the temperaments and use.

It is obvious that the form charactertics-

> Square face, Outspread nose, Short neck, Heavy build,

mark the pure sanguine, bilious, and lymphatic temperaments as physically powerful temperaments, and therefore more OBSERVATIONS ON THE SCHEME. 125

fit for mechanical pursuits than the nervous temperament, the form characteristics of which—

> Tapering face, Narrow nose, Long neck, Slim build,

mark it as a gentle temperament.

Lavater has given very similar signs—

- "A thick neck,
- "A broad face,
- "A strong prominent chin"

as those of physical strength, and

- "A long, cylindrical neck,
- "Smallness of nose, and
- "Small chin"

as those of weakness.

It will be seen (chap. vi.) that the three physically powerful temperaments — the

sanguine, the bilious, and the lymphatic —are also matter-of-fact temperaments, and that the nervous is intellectual as well as gentle, and tempers and refines them.

The relation just referred to between form and use suggests that "the survival of the fittest" may apply to the temperaments.

Labour-saving appliances and inventions having rendered physical strength less generally necessary in the daily pursuits of an increasing proportion of the population, it may be that the square face, outspread nose, short neck, and heavy build of the three physically powerful and matter-of-fact temperaments—the sanguine, the bilious, and the lymphatic—are giving place to the tapering face, small features, long neck, and slight frame of the gentle, imaginative, and intellectual temperament—the nervous.

THE MENTAL CHARACTERISTICS OF THE SCHEME.

As the mental characteristics of the temperaments have received even less consideration from authors than the physical ones, I have not been able to give special authority for those in the scheme, except in the few extracts that precede it, but none were admitted without careful consideration. The sixth and seventh—sources of happiness, and manner of speech—being unusual, require notice.

6. Sources of Happiness.

That the ordinary sources of happiness merited a place as one of the mental characteristics is shown in the belief expressed by Mr. Galton, in the Record of Family Faculties, 1884.

"Favourite pursuits and interests and artistic capabilities are facts useful to record, as being definite expressions of character and temperament."

7. Manner of Speech.

Manner of speech, one of the mental characteristics of the scheme, has been only cursorily noticed by authors. I am sanguine, however, that observation will warrant my having given it a place as one of the fundamental characteristics of the temperaments; but as modes of speech are greatly subject in early life to the influence of imitation, exceptions may frequently be found to their natural association with the different temperaments, as in the scheme.

CHAPTER VI.

THE NERVOUS TEMPERAMENT.

Its physical characteristics.—Is the key-stone of the temperaments.— Tempers or refines the three other pure temperaments.—Newly recognized as one of the four temperaments.— Confounded with nervousness.— Carlyle and Charles Lamb.—Its distinctive natural action.—Characterized by J. S. Mill.—Exemplified in Nelson, Wm. Hunter, and Dickens.—Is careless of supply of energy.—Physical bankruptcy, or nervousness, the result.—Probably an increasing temperament.

A LTHOUGH the four temperaments are probably sufficiently characterized in the scheme that I have arranged (chap. iv.),

I have thought it necessary to give an extended description of the nervous temperament, that the common error may be avoided of confounding it with nervousness, which is altogether a departure from the natural or healthy manifestations of the temperament.

The nervous has only recently taken the place of the melancholic as one of the four temperaments, and all its physical characteristics have not yet been sufficiently determined.

Even Dr. Pritchard (Cyclopædia of Practical Medicine) says:—

"It is not distinguished, as the other tempera-"ments are, by marked diversity of external "character, and, therefore, cannot be accepted "as one."

I have no doubt, however, that the face tapering to the chin from a high or broad forehead, small features, a long neck, and a slight frame—the physical characteristics assigned to it in the scheme of the four pure or standard temperaments—mark it well, and establish its claim.

I regard it as the key-stone of the temperaments, binding them together, and rendering their study systematic and practical.

The other pure temperaments are rough and matter-of-fact; the nervous tempers, softens, and refines them.

In the sanguine, the bilious, and the lymphatic, the face and features—John Bull-like—are broad, and the neck short; and variety would be wanting in nature's chief work were it not that the nervous temperament, like the wand of the magician, works wondrous change.

Replace the broad features of any of the

other pure temperaments by the small chiselled ones of the nervous, and the face, although still broad, becomes refined.

Replace also the short by a long neck, another characteristic of the nervous temperament,—and the refinement is strikingly increased.

What literature would be without the grace, the tenderness, the sublimity of poetry, the other temperaments would be without the nervous.

Like the other temperaments the Nervous was discriminated by physicians; but no longer ago than the beginning of the present century, when nervousness first claimed their attention.

A recent writer observes:-

"Our fathers in medicine of the last century, "if they could be brought from their graves, "would have to be told what we mean by nervousness." (See appendix to chap. xii.)

Unfortunately, the signs of the disease nervousness have come to be popularly accepted as the natural action of the nervous temperament; hence the belief that it is a wretched temperament, which makes life almost intolerable to its possessor and all who live with him; whereas, on the contrary, it is a refined temperament that eagerly pursues and keenly enjoys pure pleasures of every kind; that delights and charms by a vivid imagination; with wit that does not injure, and sympathy that always soothes.

It is however a delicate temperament, feeling pain more acutely than the other temperaments, and liable, on the slightest constitutional disturbance, to be invaded by its enemy nervousness, always waiting an opportunity.

Whenever any one begins to make himself and those around him miserable about trifles that others would overlook, or be indifferent to, nervousness has supervened.

Of Carlyle it is said in the review of Mrs. Carlyle's letters in *The Times* (March 31st, 1883):—

"He was morbidly nervous, irritable, and "thin-skinned. The slightest noise prevented "his sleeping; the slightest disturbance pre"vented his working. He could tolerate no "derangement of his habits; and the trifles "that seriously annoyed him threw him off "his balance for days."

Charles Lamb says of himself:-

"Business which I once used to enter upon with some degree of alacrity, now wearies, affrights, and perplexes me. I fancy all sorts of discouragements, and am ready to give up an occupation which gives me bread, from a harassing conceit of incapacity.

"The slightest commission given me by a "friend, or any small duty which I have to "perform for myself, as giving orders to a "tradesman, haunts me as a labour impossible "to get through."

The distinctive natural action of the nervous temperament is greater sensibility and more rapid movement.

The organs of sense, and the nerves throughout the body, receive messages and carry them more quickly to their centres, which respond with equal celerity.

"The rate at which a nervous impulse travels "along a nerve to a muscle can be accurately "measured, and this has been found to vary "much in different animals. In a frog such "an impulse travels at the rate of twenty-eight "mètres per second, and in a man at the rate "of thirty-three mètres per second, and in "individual men the rate of nerve conduction "varies slightly.

"M. Hirsh has shown that there are differ-"ences in the rapidity with which impressions "are transmitted through the nerves of sight, "hearing, and touch.

"Common observation affords abundant "illustration of different rates of rapidity of "mental processes in different persons, and thus "guides to a rough estimate of the quality "of brain-matter; one man is spoken of as "quick-witted, another as slow of thought; "one is said to be vivacious, another lethargic; "and for scientific purposes, differences of this "kind are summed up in temperaments, in "which rapidity of mental action, and quality "of brain-substance, are indicated by certain "outward characteristics.

"From the nervous to the lymphatic tem"perament, through the sanguine and bilious
"and intermediate temperaments, compounded
"of these, there is a gradual diminution in
"the rate of nerve action, and in the fineness
"of quality of nerve-substance."—Dr. Crichton
Browne, in The Book of Health, p. 285-6.

Rapidity of mental action is one of the most striking characteristics of the nervous temperament.

You are speaking to one of this temperament; he sees the conclusion of your sentence before it is finished; probably helps you to finish it; and has begun his reply while you are still speaking. He asks you to do some little thing for him, but before you can do it, he does it himself.

Rapidity of muscular movement is equally characteristic.

Professor Laycock says, as already quoted:—

"Whilst the flow of ideas is rapid and "the expression of them prompt, the muscular "movements are remarkable for their energy "and rapidity, so that the limbs and body "move quickly and impulsively." J. S. Mill in one of his works says:—

"It is the character of the nervous tempera"ment to be capable of sustained excitement,
"holding out through long-continued effort.
"It is what is meant by spirit. It is what
"makes the high-bred race-horse run without
"slackening speed till he drops down dead.
"People of this temperament are the material
"of great orators, great preachers, impressive
"diffusers of moral influences."

That is quite in harmony with what Nelson writes of himself in letters quoted by Southey:—

"While I serve I will do it actively and to the best of my abilities. I require nursing like a child: my mind carries me beyond my strength, and will do me up; but it is my nature."

Professor Laycock says of the celebrated William, brother of the still more celebrated John Hunter: -

"William Hunter was a well-marked example "of the nervous temperament. His small dapper "person, small limbs, small mobile features, "thin alæ nasi (sides of the nose) and lips, "are very characteristic, as well as his active "habits and power of continuous labour."

The busts of Dickens show the tapering face of the Nervous Temperament; and Mr. Forster gives numerous proofs of "his untiring energy in work and play."

"Bar-leaping, bowling, and quoits were "among the games carried on with the greatest ardour, and in sustained energy, what is called *keeping it up*, Dickens certainly distanced every competitor."

The following probably shows a departure from the healthy action of the temperament:—

"Little Mary and her sister Kate had taken "much pains to teach their father the polka

"that he might dance it with them at their brother's birthday festivities (held this year on the 7th, as the 6th was a Sunday), and in the middle of the previous night, as he lay in bed, the fear had fallen on him suddenly that the step was forgotten, and there and then, in the dark, cold wintry night, he got out of bed to practise it.

"Anything more characteristic could certainly not be told, unless I could have
shown him dancing it afterwards, and far
excelling the youngest performer in untiring
vigour and vivacity."

Unfortunately, it is characteristic of the nervous temperament to ignore the necessity for fresh supplies of energy to meet the expenditure, and nervousness—the inevitable "physical bankruptcy" of the scheme—ensues; often, alas! while life should be in its prime.

Some of the safeguards to the

maintenance of a healthy nervous system are given in *Chapter XII.*, and should be systematically followed by all of the nervous temperament; probably an increasing number (see page 126), and likely to continue to increase; for it may I think be accepted that

"The invariable tendency of education is "towards the nervous temperament."—Dr. Crichton Browne, in The Book of Health, p. 285.

Mr. Galton says:-

"One fine Sunday afternoon I sat with a "friend by the walk in Kensington Gardens "that leads to the bridge, and which on such "occasions is thronged by promenaders. It "was agreed between us that whichever caught "sight of a typical John Bull should call the "attention of the other. We sat and watched "keenly for many minutes, but neither of us "found occasion to utter a word."

Probably every third or fourth person

who passed Mr. Galton and his friend was a foreigner; and the English passers-by being chiefly of the educated class, typical John Bulls could scarcely be expected. They still exist. At the Agricultural Hall, on a Smithfield Show-day, Mr. Galton and his friend would not have sat long silent; nor would they in Kensington Gardens had they been looking out for the tapering face and slim build of the nervous temperament.

CHAPTER VII.

THE COMPOUND TEMPERAMENTS.

The Compound temperaments very numerous.— Their study somewhat complex.—Physical and mental variety from the mixture of physical characteristics.—Descriptions of the Compound temperaments not found.—The usual mode of naming the Compound temperaments.—Examples.—Proposed addition to their names that they may indicate appearance.—The analysis personal Compound temperaments.—Compound colour and form characteristics.—The Oval Face and Medium Build .- The Balanced temperaments.—Examples.—The Semi-balanced temperaments.—Examples.—The Best temperament.—Forms of Compound temperaments to aid the student in analyzing faces.

THE student of temperament who has become familiar with the physical

characteristics of the four pure or standard temperaments, as in the scheme (chap. iv.), is prepared to enter on the somewhat complex study of the mixed or compound temperaments, which are very numerous; the physical characteristics of the pure temperaments being interwoven with one another in the most varied manner.

Any of the four temperaments free from invasion by at least one of the physical characteristics of another is not often seen; and it will now be realized by the student that the precise assignment of physical characteristics to the pure temperaments which are seldom seen, renders possible the analysis of the compound temperaments which are so often seen.

By the mixture of the physical characteristics of different temperaments seen in nearly every face, nature bestows on man the charm of variety that beautifies all her lesser works, and the study of the temperaments is pursued with increasing interest when it is seen that even one colour or form characteristic of a different temperament from the prevailing one, brings with it something of the mental action of its own temperament. That, for instance, if black eyes replace blue ones, they bring more or less of the caution, the persistence, the ambition, of the bilious temperament; and similarly, if blue eyes replace black ones, they bring more or less of the impulsiveness, the love of change, the unwarranted hopefulness of the sanguine temperament.

By reference to the physical characteristics of the scheme, and the few compound characteristics given farther on in this chapter, the student will soon be able to recognize those compound temperaments

which are most frequently seen, and sooner or later, as he is more or less gifted with observation and memory, to analyze any temperament, however uncommon or however compounded.

But he must pursue the study as Professor Laycock advised his medical classes to pursue it :-

"By habitual, constant, and careful obser-"vation, which is easy, because you can "always practise the art wherever there are "faces and forms to be seen. If you look "about you, whether in the clinical wards or "in the streets, you will observe the like "variety of temperaments."

Although the compound temperaments are those most frequently seen, I have failed to find any attempt to describe them with precision,* and have therefore

^{*} Mr. Starkweather, in "The Law of Sex," 1883, p. 118, says: "Dr. Powell, in his 'Human Temperaments,'

had but little guidance in the endeavour to give method to this important part of the subject.

A classification intended to include every form of face and the various colours of the hair, eyes, and complexion must be somewhat complex, but I am sanguine that the one I present will, after a time, be found by others as it is by myself, easily remembered and as inclusive as need be.

If not, it will at least serve as a basis on which other observers may construct one that may be found simpler and more generally applicable.

"points out with considerable precision the colour of the hair and eyes, and the complexion, by which the temperaments in all their numerous combinations may be known. He makes black or dark hair, eyes, and skin spring from the bilious element, and the light from the sanguine."

Mr. Starkweather has omitted all reference to the publication of Dr. Powell's work, and I regret that, although I have made every inquiry, I have failed to trace it.

The compound temperaments should take the names of the temperaments that compose them, the temperament being named first which contributes the greater number of characteristics.

The following are examples:—

SANGUINE AND BILIOUS TEMPERAMENT.

Hair . . . Red or reddish.

Complexion . More or less florid.

Face . . . Square.

Nose . . . Outspread.

Neck . . . Short.

Build . . . Heavy (thickset).

(Six Sanguine characteristics, see scheme.)

Eyes . . . Black or dark brown.

(One Bilious characteristic, see scheme.)

An example this of the invasion of a pure temperament by one characteristic of another.

THE COMPOUND TEMPERAMENTS. 149

SANGUINE AND NERVOUS TEMPERAMENT.

Hair . . . Red or reddish.

Eyes . . . Blue.

Complexion . More or less florid.

Nose . . . Outspread.

(Four Sanguine characteristics, see scheme.)

Face . . . Tapering from a high or broad forehead to a nar-row chin.

Neck . . . Long.

Build . . . Slim.

(Three Nervous characteristics, see scheme.)

A happy tempering this of the impulsive, matter-of-fact, and self-satisfied Sanguine, by the irresolute, imaginative, and regretting Nervous temperament.

SANGUINE, BILIOUS, AND NERVOUS TEMPERAMENT.

Hair . . . Red or reddish.

Complexion . More or less florid.

Face . . . Square.

Neck . . . Short.

Build . . . Heavy (thickset).

(Five Sanguine characteristics, see scheme.)

Eyes . . . Black.

(One Bilious characteristic.)

Nose . . . Narrow.

(One Nervous characteristic.)

The names of the four pure temperaments—Sanguine, Bilious, Lymphatic, and Nervous—represent physical characteristics which make a life-like portrait. To be told that any one is of a sanguine temperament should bring before the mind's eye a man with red or reddish hair, blue eyes, a more or less florid complexion, and the other physical characteristics of his temperament. And so of the other pure temperaments.

The names of compound temperaments do not indicate personal appearance with the same certainty. Sanguine and Bilious temperament, for example, does not inform us which of the bilious characteristics has replaced a sanguine one; whether black hair, black eyes, or a darkish complexion. I therefore suggest that in conversation and literature the characteristics which replace those of the chief temperament be always named; as in the following

abbreviated forms of the three preceding examples:—

Sanguine and Bilious temperament—The eyes black (or dark brown): one replacing characteristic—Bilious.

Sanguine and Nervous temperament—The face tapering, the neck long, and the build slim: three replacing characteristics—Nervous.

Sanguine, Bilious, and Nervous temperament—The eyes black and the nose narrow: two replacing characteristics—one Bilious and one Nervous.

So supplemented by the replacing characteristics, the names of compound temperaments would indicate external appearance with certainty.

Several compound temperaments are named in a paragraph in *Ultima Thule*; or, A Summer in Iceland, by Capt. Burton, who shows unusual familiarity with the

temperaments; but the names would have made readers still better acquainted with the Icelander's appearance had they been followed by the replacing characteristics of the *lymphatic*, the *sanguineous*, and the *bilious* temperaments:—

"The Icelander's temperament is Nervoso"lymphatic, and, at best, Nervoso-sanguineous.
"The Nervoso-bilious, so common in the South
"of Europe, is found but rarely; and the
"author never saw an instance of the pure
"Nervous often met with in the United States
"and the Brazil."

Mr. Starkweather, in The Law of Sex, says:—

"The musical temperament is a combination of the lymphatic and nervous" (page 169);

and in reference to one of the illustrations-

"The woman is of the nervous-lymphatic order, and the perfection of the musical temperament" (page 140).

In one of three essays on Physiognomy in The Cornhill Magazine, vol. iv., the same compound temperament—nervous and lymphatic—is assigned to musicians:—

"We put together the heads of the chief "musicians, and no one can help observing in all "the greatest—Bach, Handel, Mozart, Beethoven "—the presence of a nervous in remarkable "combination with a lymphatic temperament. We "look at the three peoples who are the most "famous for musical skill—Italians, Germans, "and Jews—it is to note in them generally a "temperament half nervous, half lymphatic, in "which the nervous volatility is rendered suffi"ciently precise by abundance of phlegm."

Naming the replacing lymphatic characteristics, as I have suggested, was necessary to make known to readers which of the nervous and lymphatic characteristics Mr. Starkweather and the Cornhill writer call the musical temperament; for in one nervous and lymphatic compound, there may be the

lymphatic eye; in another the lymphatic complexion; in a third the lymphatic hair; two of these characteristics in a fourth; and in a fifth, all three.

As lymphatic characteristics are chiefly those of colour, Mr. Starkweather's colourless illustration of the nervous-lymphatic woman does not help us to her lymphatic characteristics, nor do the heads of Bach, Handel, Mozart, and Beethoven, seen near one another on the Albert Memorial.

As Germans are so different in appearance from Italians and most Jews, the statement of the Cornhill writer that all three are generally nervous and lymphatic, required to be supported by the names of the nervous and lymphatic characteristics which he saw in the three peoples.

It would be interesting were anyone who has become familiar with the tem-

peraments and sees much of our musical celebrities, to note the physical characteristics of as many of them as possible and make known the result. It would surprise me were it to come out that lymphatic characteristics are more general in them than are sanguine and bilious.

The analysis of the compound temperaments would be comparatively easy were it limited to the physical characteristics of the four pure temperaments; but it is not; for other colours of the hair and eyes than those in the scheme; one other form of face—the oval—and a medium build of body between thickset and slim, are often seen, and must be included in a classification which aims at enabling the observer to recognize and name the temperament of whoever he may meet.

I assume that the other colours of the hair and eyes than those in the scheme, and the other form of the face—the oval—are the outcome of the blending; the former, of two of the colour characteristics of the four pure temperaments, and the latter, of the two forms of the face—the square and the tapering—and I have named them, and also the build of the body between thickset and slim, Compound Characteristics.

I have no authority for introducing Compound Characteristics into the study of the temperaments, but the material was at hand, and they seemed to me the missing link in analyzing the compound temperaments which have baffled observers who endeavoured to recognize and name every temperament.

The Compound Characteristics are,

Four colours of the hair (page 112).

Three colours of the eyes (page 115).

One form of the face (oval).

One form of the figure (medium build).

COMPOUND COLOUR CHARACTERISTICS. See chap. v.

(The Hair.)

- 1. Dark red . . Sanguine and Bilious (red and black) characteristic.
- 2. Fair red . . Sanguine and Lym-(red and sandy) phatic characteristic.
- 3. Brown . . . Sanguine and Nervous (red and grey) characteristic.
- 4. Dark brown . Bilious and Lymphatic (black and sandy) characteristic.

(The Eyes.)

- 1. Dark blue . . Sanguine and Bilious (blue and black) characteristic.
- 2. Brown . . . Bilious and Lymphatic (black and brown grey) characteristic.
- 3. Dark Grey . Bilious and Nervous (black and grey) characteristic.

COMPOUND FORM CHARACTERISTICS.

The Oval Face and Medium Build

characterize two compound temperaments which are very frequently seen. One has received the name of the balanced temperament, and I have ventured to name the other the semi-balanced.

-When I have described these, I hope to have provided the student with all the information necessary to a practical knowledge of the temperaments.

Guided by the details and examples in this chapter, he will not find it difficult, I think, if practically familiar with the four pure temperaments, to become equally familiar with the compound ones, and so be able to recognize and name any temperament. THE BALANCED TEMPERAMENT.

The compound temperament, in which the four pure temperaments are so equally represented by their physical characteristics that no one temperament is more prominent than another, was called by the ancients the balanced temperament; probably the most appropriate name that has been given to it.

It is very frequently seen, perhaps more frequently than any other of the temperaments, but it has hitherto remained a mere idea, for, although both ancients and moderns have inferred and named it, it has been characterized by neither.

The face is always oval, and the build medium—between thickset and slim—and the compound colour characteristics (page 158) are frequent components of the temperament.

The following are examples:—

A BALANCED TEMPERAMENT.

Face . . Oval . . The blended square and tapering faces of the four temperaments.

Build . Medium . The blended stout

and slim builds of

the four tempera
ments.

Nose . . Outspread . Sanguine, Bilious, and Lymphatic.

Neck . . Long . . Nervous.

Hair . Black . . Bilious.

Eyes . . Blue . . . Sanguine.

Complexion. . . Colourless . Lymphatic.

A BALANCED TEMPERAMENT.

Face . . Oval . . The blended square and tapering faces of the four temperaments.

Build . . Medium . The blended stout

and slim builds of

the four tempera
ments.

Nose . . Outspread . Sanguine, Bilious, and Lymphatic.

Neck . . Long . . Nervous.

Hair . . Fair-brown . Lymphatic . (Flaxen)

Eyes . . Blue . . . Sanguine.

Complexion. Dark . . Bilious.

THE COMPOUND TEMPERAMENTS. 163

A BALANCED TEMPERAMENT.

Face . . Oval . . The blended square and tapering faces of the four temperaments.

Build . Medium . The blended stout

and slim builds of

the four tempera
ments.

Nose . . Narrow . Nervous.

Neck . . Long . . Nervous.

Hair . . * Dark-red . Sanguine and Bilious.

Eyes . . * Dark-blue . Sanguine and Bilious.

Complexion. . . Colourless . Lymphatic.

^{*} Compound Characteristics (page 158).

THE SEMI-BALANCED TEMPERAMENT.

I have named the temperament semibalanced in which the physical characteristics associated with the oval face and medium build are not balanced, but chiefly Sanguine, Bilious, or Lymphatic, or wholly Nervous.

There are, therefore, four forms of this compound temperament:—

The Semi-balanced Sanguine temperament (Oval and Sanguine).

The Semi-balanced Bilious temperament (Oval and Bilious).

The Semi-balanced Lymphatic temperament (Oval and Lymphatic).

The Semi-balanced Nervous temperament (Oval and Nervous).

In analyzing faces I mentally express the long names of these four temperaments by the short ones given in italics.

THE SEMI-BALANCED SANGUINE TEMPERAMENT.

(Oval and Sanguine.)

Face . Oval . . The blended square and tapering faces of the four temperaments.

Build . Medium . The blended stout

and slim builds of

the four tempera
ments.

Hair . . Reddish . Sanguine.

Eyes . . Blue . . Sanguine.

Complexion Sanguine.

Nose . . Narrow . Nervous.

THE SEMI-BALANCED BILIOUS TEMPERAMENT.

(Oval and Bilious.)

Face . . Oval . . The blended square and tapering faces of the four temperaments.

Build . . Medium . The blended stout and slim builds of the four temperaments.

Hair . . Black . . Bilious.

Eyes . . Black . . Bilious.

Complex-Dark . . Bilious. ion. . .

Nose . . Narrow . . Nervous.

THE COMPOUND TEMPERAMENTS. 167

THE SEMI-BALANCED LYMPHATIC TEMPERAMENT.

(Oval and Lymphatic.)

Face . . Oval . . The blended square and tapering faces of the four temperaments.

Build . . Medium . The blended stout

and slim builds of

the four tempera
ments.

Hair . . Sandy . . Lymphatic.

Eyes . . Light-hazel Lymphatic.

Complexion . . . Colourless . Lymphatic.

Nose . . Narrow . Nervous.

THE SEMI-BALANCED NERVOUS TEMPERAMENT.

(Oval and Nervous.)

Face . . Oval . . The blended square and tapering faces of the four temperaments.

Build . Medium . The blended stout and slim builds of the four temperaments.

Hair . . Light brown Nervous.

Eyes . . Grey. . . Nervous.

Complex- Pale and clear Nervous. ion. .

Nose . . Narrow . Nervous.

THE BEST TEMPERAMENT.

It may be asked, Which is the best temperament? The reply is not doubtful. The compound in equal proportions of the four pure temperaments,—the balanced temperament,—is certainly the best for its possessor, for in it the four temper one another, and the troublesome special tendencies or impulses that characterize every pure temperament are toned down to comfortable smoothness of action.

The impulsiveness of the Sanguine is tempered by the inaction of the Lymphatic. The eye-to-business, position, and power, of the Bilious, by the imaginativeness of the Nervous. The love of ease, and contentment with personal comforts, of the Lymphatic, by the ambition of the Bilious. The perplexity and indecision of the Nervous from seeing too

many ways open, by the impulsiveness of the Sanguine.

That surely is the best temperament whose action avoids extremes; has sufficient of the natural force of all the pure temperaments to acquire any kind of knowledge; is well-fitted for success in any profession or business; retains through life the natural figure, and has equal health, free from the tendency or predisposition that every pure temperament has to disease or derangement of its special organ.

Such is the Balanced temperament.

FORMS OF COMPOUND TEMPERAMENTS.

To familiarize the student with the formation and the analysis of the Compound temperaments, I give the forms of three of the many classes into which they may be divided—

- 1. Sanguine and Bilious.
- 2. Sanguine and Lymphatic.
- 3. Sanguine and Nervous.

As the Sanguine, the Bilious, and the Lymphatic temperaments have the same form characteristics—

Square face,
Outspread nose,
Short neck,
Heavy build—

the compound temperaments they can

form with one another are very few, being limited to the replacement of their colour characteristics—

The colour of the hair,

The colour of the eyes,

The colour of the complexion—

the chief temperament having two colour characteristics, and the replacing temperament one.

All the physical characteristics—colour and form—of the Nervous temperament being different from those of the Sanguine, the Bilious, and the Lymphatic temperaments (see scheme), it has a wide range of replacement, which it exercises freely, and the compound temperaments in which it is represented by one or more of its characteristics are, therefore, extremely numerous.

I. Forms of Compound Temperaments,

IN WHICH A SANGUINE CHARAC
TERISTIC IS REPLACED BY A BILIOUS.

SANGUINE AND BILIOUS COMPOUND.

(The Hair Black.)

Face . . . Square.

Nose . . . Outspread.

Neck . . . Short.

Build . . . Thickset.

Eyes . . . Blue.

Complexion. More or less florid.

(Six Sanguine characteristics.)

Hair . . . Black.

(One Bilious characteristic.)

SANGUINE AND BILIOUS COMPOUND. (The Eyes Black.)

Face . . . Square.

Nose . . Outspread.

Neck . . . Short.

Build . . . Thickset.

Hair . . . Red or reddish.

Complexion. More or less florid.

(Six Sanguine characteristics.)

Eyes . . . Black.

(One Bilious characteristic.)

SANGUINE AND BILIOUS COMPOUND. (The Complexion Dark.)

Face . . . Square.

Nose . . Outspread.

Neck . . . Short.

Build . . . Thickset.

Hair . . Red or reddish.

Eyes . . . Blue.

(Six Sanguine characteristics.)

Complexion . Dark or darkish.

(One Bilious characteristic.)

II. FORMS OF COMPOUND TEMPERAMENTS, IN WHICH A SANGUINE
CHARACTERISTIC IS REPLACED BY
A LYMPHATIC.

SANGUINE AND LYMPHATIC COMPOUND.

(The Hair Flaxen, Sandy.)

Face . . . Square.

Nose . . . Outspread.

Neck . . . Short.

Build . . . Thickset.

Eyes . . . Blue.

Complexion. More or less florid.

(Six Sanguine characteristics.)

Hair . . . Flaxen, sandy.

(One Lymphatic characteristic.)

SANGUINE AND LYMPHATIC COMPOUND.

(The Eyes Light Hazel, Dim.)

Face . . . Square.

Nose . . . Outspread.

Neck . . . Short.

Build . . . Thickset.

Hair . . . Red or reddish.

Complexion. More or less florid.

(Six Sanguine characteristics.)

Eyes . . . Light hazel, dim.

(One Lymphatic characteristic.)

SANGUINE AND LYMPHATIC COMPOUND.

(The Complexion Colourless.)

Face . . . Square.

Nose . . . Outspread.

Neck . . . Short.

Build . . . Thickset.

Hair . . . Red or reddish.

Eyes . . . Blue.

(Six Sanguine characteristics.)

Complexion . Colourless.

(One Lymphatic characteristic.)

It has been stated (page 148) that the pure temperament which contributes the greatest number of physical characteristics to a compound one should be named first, and in the foregoing forms the Sanguine is named first, because—the form characteristics of the three temperaments being the same—it contributes two of the three colour characteristics. Similarly, when the Bilious or Lymphatic temperament contributes two, it should be named first.

But the Sanguine, the Bilious, and the Lymphatic temperaments may contribute equally to the colour characteristics—one each — in which case the temperament which contributes the colour of the complexion should, I think, be named first.

III. FORMS OF COMPOUND TEMPERAMENTS IN WHICH SANGUINE CHARACTERISTICS ARE REPLACED BY
NERVOUS.

SANGUINE AND NERVOUS COMPOUND. (The Hair Light Brown.)

Face . . . Square.

Nose . . . Outstretched.

Neck Short.

Build . . . Thickset.

Eyes . . . Blue.

Complexion . . More or less florid.

(Six Sanguine characteristics.)

Hair . . . Light brown.

(One Nervous characteristic.)

SANGUINE AND NERVOUS COMPOUND. The Eyes Grey.

Face . . . Square.

Nose Outstretched.

Neck . . . Short.

Build . . . Thickset.

Hair . . . Red or reddish.

Complexion . . More or less florid.

(Six Sanguine characteristics.

Eyes . . . Grey.

(One Nervous characteristic.)

THE COMPOUND TEMPERAMENTS. 179

SANGUINE AND NERVOUS COMPOUND.

(The Complexion Pale, Clear.)

Face . . . Square.

Nose . . . Outstretched.

Neck . . . Short.

Build . . . Thickset.

Hair . . . Red or reddish.

Eyes . . . Blue.

(Six Sanguine characteristics.)

Complexion . . Pale, clear.

(One Nervous characteristic.)

SANGUINE AND NERVOUS COMPOUND.

(The Nose Narrow.)

Hair . . . Red or reddish.

Eyes . . . Blue.

Complexion . . More or less florid.

Face . . . Square.

Neck . . . Short.

Build . . . Thickset.

(Six Sanguine characteristics.)

Nose . . . Narrow.

(One Nervous characteristic.)

SANGUINE AND NERVOUS COMPOUND.

(The Neck Long.)

Hair . . . Red or reddish.

Eyes . . . Blue.

Complexion . . More or less florid.

Face . . . Square.

Nose . . . Outspread.

Build . . . Thickset.

(Six Sanguine characteristics.)

Neck . . . Long.

(One Nervous characteristic.)

SANGUINE AND NERVOUS COMPOUND.

(Hair Light Brown, Nose Narrow.)

Eyes . . . Blue.

Complexion . . More or less floria.

Face . . . Square.

Neck . . . Short.

Build . . . Thickset.

(Five Sanguine characteristics.)

Hair . . . Light brown.

Nose . . . Narrow.

(Two Nervous characteristics.)

SANGUINE AND NERVOUS COMPOUND.

(Eyes Grey, Nose Narrow.)

Hair . . . Red or reddish.

Complexion . . More or less florid.

Face . . . Square.

Neck . . . Short.

Build . . . Thickset.

(Five Sanguine characteristics.)

Eyes . . . Grey.

Nose . . . Narrow.

(Two Nervous characteristics.)

SANGUINE AND NERVOUS COMPOUND.

(Complexion Pale, Clear, Nose Narrow.)

Hair . . . Red or reddish.

Eyes . . . Blue.

Face . . . Square.

Neck . . . Short.

Build . . . Thickset.

(Five Sanguine characteristics.)

Complexion . . Pale, clear.

Nose . . . Narrow.

(Two Nervous characteristics.)

SANGUINE AND NERVOUS COMPOUND. (Hair Light Brown, Neck Long.)

Eyes Blue.

Complexion . . More or less florid.

Face . . . Square.

Nose . . . Outspread.

Build . . . Thickset.

(Five Sanguine characteristics.)

Hair . . . Light brown.

Neck . . . Long.

(Two Nervous characteristics.)

SANGUINE AND NERVOUS COMPOUND.

(Eyes Grey and the Neck Long.)

Hair . . . Red or reddish.

Complexion . . More or less florid.

Face . . . Square.

Nose . . . Outspread.

Build . . . Thickset.

(Five Sanguine characteristics.)

Eyes Grey.

Neck . . . Long.

(Two Nervous characteristics.)

SANGUINE AND NERVOUS COMPOUND.

(Complexion Pale, Clear, and Neck Long.)

Hair . . . Red or reddish.

Eyes . . . Blue.

Face . . . Square.

Nose . . . Outspread.

Build . . . Thickset.

(Five Sanguine characteristics.)

Complexion . . Pale, clear.

Neck . . . Long.

(Two Nervous characteristics.)

SANGUINE AND NERVOUS COMPOUND.

(Face Tapering, Neck Long, Build Slim.)

Hair . . . Red or reddish.

Eyes . . . Blue.

Complexion . . More or less florid.

Nose . . . Outspread.

(Four Sanguine characteristics.)

Face . . . Tapering from a high

or broad forehead.

Neck . . . Long.

Build . . . Slim.

(Three Nervous charactéristics.)

There are still other Sanguine compounds:-

Sanguine, with Bilious and Nervous, Sanguine, with Lymphatic and Nervous, and others.

Compounds of the Bilious, and also of the Lymphatic, with the three other temperaments are equally numerous as those of the Sanguine; and the possible compounds of the Nervous temperament with the Sanguine, the Bilious, and the Lymphatic are almost innumerable.

It is hoped, however, that the forms of Sanguine compounds just given may enable observers who persevere in the study, to recognize, analyze, and name, almost at a glance, the compound temperaments most frequently seen.

CHAPTER VIII.

MODIFICATION OF THE TEMPERAMENT.

Modification by business pursuits.—Mrs. Carlyle.—Mr. Froude on professional mannerisms.—Modification by surrounding circumstances other than business pursuits.—
By Oxford and Cambridge Universities.—
Lord Houghton and Cardinal Manning.—
Manner of speech.—Its susceptibility to modification early in life.—Change of temperament.—Dr. Wilks, Dr. Pritchard, and Mr. Buckle, on the causes which produce diversity of temperament.—National temperaments.—Change in the colour of glass eyes sold in America.

APPENDIX: "British Calibre," from *The Times*, on the Reports of the Anthropometric Committee of the British Association.—"The Races of Britain," by Dr. Beddoe, F.R.S.

"What strange shapeable creatures we are!"
—Carlyle.

THE observer of temperament soon finds that the traits of character naturally

associated with physical characteristics as in the scheme (chap. iv.), are often more or less modified by various causes; every system that seeks to infer mental qualities from outward appearance having frequently to give way to the capability of adaptation and improvement that men are fortunately endowed with.

In business pursuits the sanguine man finds that he must curb his impetuosity and pursue business much as the coolheaded bilious man does. The lymphatic man has to bestir himself; and telegrams and messengers waiting reply on business of importance, compel the man of nervous temperament to put aside his doubts and act promptly.

The action of the temperaments is levelled up or down to business uniformity.

Carlyle could have had no better

example of how strangely shapeable human creatures are than his own wife.

In the review of Mrs. Carlyle's letters in *The Times* it is said:—

"Mrs. Carlyle had two distinct sides to her "character: on the one hand, she was what "circumstances had made her; she was a "bustling, frugal, notable housewife, who seemed "to regard everything from the practical point "of view. At the same time, she was intensely "emotional, and almost morbidly susceptible. "That she had schooled herself to go on "phlegmatically and conscientiously about her "daily tasks is all the more to her credit."

Certain mannerisms of external action result from business and professional pursuits.

Dr. Wilks quotes Mr. Froude as having well remarked in one of his essays:—

"Every one of the many professions has "a peculiar character of its own, which, with "rare exceptions, it inflicts on those who follow "it. There is the shopkeeper type, the manu-"facturing type, the medical type, the lawyer "type, the soldiers', the sailors':

"The nature of man is,

"'Like the dyer's hand, "'Subdued to what it works in,'

"and we can distinguish with ease on the "slightest intercourse to what class a grown "person belongs: it is seen in his look; in "his words; in his tone of thought; his voice, "gesture, and everything he does."

Mr. Froude has but expressed what everyone knows, and often applies in setting down people they know nothing of, as this or that.

How the configuration is influenced by outdoor rural occupations and freedom from the mental strain and anxiety caused by the rapidity of decision and action required in City pursuits, may be seen

in the capacious forms of the agriculturists at the Agricultural Hall on a Smithfield Show-day.

The surrounding circumstances other than business pursuits that modify mental action, mode of speech, the natural impulses and tendencies, and the manner of men, are chiefly those of association with others; of children with their parents, their sisters and brothers, their schoolfellows, and the companions they are fond of.

The only sanguine carroty-haired girl of "The Irving Family" could not fail to become in many ways like her bilious black-haired sisters (page 372).

Old bachelors and family men, old maids and grandmothers, are contrasts; and all who live an isolated, hermit-like life differ conspicuously both in mind and manner from those who enjoy and cultivate society.

On nothing has association more influence than the mode of speech.

As talking habitually to a deaf person begets the habit of loud speaking, so undertoned speech may arise from being obliged to talk in a low tone, and children, however loud and impulsive by nature, may have their speech and manner permanently subdued by having to move about the house afraid of being heard by a nervous father or mother.

An interesting account of the life and works of the late Lord Houghton appeared in *The Times* a day or two after his death, and I extract from it a reminiscence of his Cambridge days, supplemented by particulars from Cardinal Manning which apply to the subject of this chapter.

"It was in company with Mr. Sunderland "and Mr. Arthur Hallam that I formed part "of a deputation sent from the Union of Cam-

"bridge to the Union of Oxford. And what "do you think we went about? Why, we "went to assert the claims of Mr. Shelley to "be regarded as a greater poet than Lord "Byron. We had a very interesting debate, "one of the principal speakers at which "reminded me of the circumstance the other "day."

The principal speaker referred to is now Cardinal Manning, and his account of the debate shows very strikingly the effect of surrounding circumstances on manner.

Eton boys at Cambridge, and others at Oxford, became after a few years Oxford and Cambridge men differing widely in their oratory, as described. Probably, as some say, the influence of the Universities on ordinary address also is such that the stamp of the University can be recognized through life.

"It was, I think, a passage-of-arms got up by the Eton men of the two Unions. My

"share, if any, was only as a member of the "august committee of the green-baize table. "I can, however, well remember the irruption "of the three Cambridge orators. The Oxford "men were precise, orderly, and morbidly "afraid of excess in word or manner. The "Cambridge oratory came in like a flood "into a mill-pond. Both Monckton Milnes "(Lord Houghton), and Hallam took us "aback by the boldness and freedom of their "manner. I remember the effects of Sunder-"land's declamation to this day. We were "utterly routed."

CHANGE OF TEMPERAMENT.

The phrase "change of temperament" is in common use, but probably modification of mental characteristics and traits of character is meant; not a change from one temperament to another, as the phrase implies.

Yet an eminent physician and author of

fifty years ago (Dr. Mason Good), concludes with the following words a comprehensive description of the temperaments, which, however, like the descriptions of most authors, are not from personal observation, but ancient Greek and modern French sources.

"Each of these temperaments, how widely "soever they differ from each other, is capable "of being transmuted into any of the rest. "The temperament of boys may be born with "them, but they are capable of alteration, "nay, of a total reversion both in mind and "body."—The Book of Nature.

This is a thoughtless exaggeration, for certainly "transmutation" and "total reversion" cannot apply to any change that may take place in the physical or the mental characteristics of any of the temperaments.

A moment's consideration will suffice

to convince any one who is familiar with the physical and mental characteristics of the four temperaments, as in the scheme, that no one of the four can change into another; the sanguine into the bilious; the bilious into the lymphatic, or the lymphatic into the nervous.

In the chief physical characteristics of a temperament there can be no fundamental change by time. The boy may at first sight appear lost in the man, but the features are soon seen unchanged. The face remains broad, oval, or tapering; the nose outspread or narrow; the chin full or pointed; the neck short or long.

No boy, sanguine, fair, and impulsive, has ever become in manhood, bilious, dark, and calculating; or lymphatic, heavy, and slow, if in boyhood he was nervous, slim, and rapid.

In some few there may have been change in the colour of the hair or of the eyes; or the complexion may have become darkened by exposure to the weather and the sun; but as the form characteristics remain the same, such change of one of the colour characteristics is very far from a change of temperament as regards the body, which Dr. Mason Good asserts is as liable as the mind, not only to "alteration," but to "a total reversion" of its temperament characteristics.

The phrase "change of temperament" is no doubt almost always used in reference to change in the mode of mental action, and when it includes only partial change, it expresses what I have fully acknowledged as modification of the mental characteristics of the temperaments.

As it is impossible to suppose complete

"transmutation" of all the mental or physical characteristics of any of the four temperaments (see scheme), and "change of temperament" may mean only partial change and so be wrongly interpreted, modification, which cannot mislead, should always be used instead.

Modification of the natural mental action of the temperaments may be only superficial and conventional.

The sanguine man may no longer show his natural warmth in daily life, but let some extraordinary circumstance rouse him to anger, and in a moment speech and action are as rapid as in his youth, his rage is violent, he takes the law into his own hands; the veneer has come off, and the natural man is revealed.

It is shown in the next chapter—"The Organs of the Temperaments,"—that the

natural mental action of the temperaments is more or less modified while there is derangement of the organs, and that there is a return of the natural action with the return of health.

The following, from Dr. Pereira, shows that the natural action of the temperaments may be modified by the kind of food that is habitually taken, and it may be inferred that vegetarianism or any special diet may suit those of one temperament, and not those of another.

"The temper of the leopard changes for the worse by being fed with two meals instead of one a day, and the temper of a gentle-man of sanguine temperament, who for some months lived on vegetables, became much less excitable, and an individual of an opposite (lymphatic) temperament was observed during the time that he lived on a reduced diet to be more irritable."

If irritability, excitability, and faults of temper may be cured by a method of treatment so rational as diet that modifies the temperament, it would be well were it generally adopted. Precision of treatment, however, obviously necessitates an intimate acquaintance with the temperaments and the effects of different kinds and quantities of diet.

NATIONAL TEMPERAMENTS.

Although in most countries there has been more or less intermixture of races, there is in all a prevailing temperament, characterized by colour, form, build, or manner, which marks the nationality of its people.

In our country, variety in the colour of the hair, eyes, and skin, in height, weight, etc., from the intermixture of races and some local causes, has lately

been reported on by the Anthropometric Committee of the British Association, and is a subject of so much interest in relation to the temperaments, and otherwise, that I give as an Appendix to this chapter an admirable account of the work done by the Committee and its results, from The Times of September 24th, 1883.

Dr. Pritchard devotes a section of his valuable article "Temperament" in The Cyclopædia of Practical Medicine to the "Origin of Temperaments, Causes which give rise to these Diversities," full of research and interest; and in the following extract, Dr. Wilks (Lecture in the Sanitary Record, 1876) attributes diversity of temperament to climate and food:—

"Probably the more highly civilised a country is, the greater the diversity of form, of temperament, and of character: different, however, as these are, there must be national peculiarities. An hotel-keeper abroad, for

"example, knows his Englishman at once. "Whatever opinion we may hold as to the "origin of man, we must regard his surround-"ing of climate and food as having been "mainly instrumental in producing his modi-"fications. In the orthodox view, as originating "from a single pair, no other conclusion can "be framed than that climate was instrumental "in producing the different races. Now these "races when of the lowest kind, as in un-"civilized nations, show no peculiarities "amongst individuals; these seem as much "alike as the sheep in a flock; they are "all employed in the same manner, they eat "the same simple food, and their mode of "life is remarkably uniform. There seem to "be no especial temperaments amongst the "African tribes, who live on vegetables, or "in some savage islands where the inhabitants "subsist on fish. If it be true that a perfect "uniformity of character exists where the food "is of one kind, we may gain a clue to the "diversity of temperament from the variety " of food used in civilised life. The nature " of the soil implying different occupations will

"also have its effects, also the influence of "light and the density of the atmosphere." Thus it has been thought that bilious "temperaments prevail in hot, and phlegmatic "in cold climates. The soil and the occu- pations of its inhabitants, necessarily de- pendent on it, produce in our own small island different types, as the agriculturists along the eastern border, the manufacturers in the centre, and the miners amongst the western hills."

The same influences are very fully considered by Mr. Buckle in his second chapter,—

"INFLUENCE EXERCISED BY PHYSICAL LAWS
"OVER THE ORGANIZATION OF SOCIETY AND
"OVER THE CHARACTER OF INDIVIDUALS,"—

which begins thus:-

"If we inquire what those physical agents "are by which the human race is most power"fully influenced, we shall find that they may
"be classed under four heads: namely, Climate,

"Food, Soil, and the General Aspects of Nature; by which last, I mean those appearances which, though presented chiefly to the sight, have, through the medium of that or other senses, directed the association of ideas, and hence in different countries have given rise to different habits of national thought. To one of these four classes may be referred all the external phenomena by which Man has been permanently affected."

In Guy's Hospital Reports, 1869, Dr. Wilks says:—

"Not only may the inhabitants of ancient "Greece and Rome be different from those "of England, but in our own country "these may have altered in the lapse of "centuries."

The following extract shows that such alteration as regards the eyes is now going on with great rapidity in some parts of America:—

GLASS EYES.

"It appears that there are as many as "1,000 wearers of these eyes in Chicago, and that from 600 to 800 eyes are sold there every year.

"Twenty years ago there were sold very many more dark eyes than light, but from that period on, the sale of dark eyes has been perceptibly dying out. About twenty light eyes are now sold to one dark. In Boston the percentage is even larger—about thirty-five blue or light eyes to one brown; while on the other hand, in New Orleans, fifty brown or dark eyes are sold to one light.

"The change in Chicago is supposed merely "to show that the influx of population has "been from the East principally, and from "Northern Europe."

Mr. Galton says:-

"The prevalent type of English face has "greatly changed at different periods, for after

"making large allowance for the fashion in " portrait-painting of the day, there remains a "great difference between the proportion in "which certain casts of features are to be met "with at different dates. I have spent some "time in studying the photographs of the "various portraits of English worthies "have been exhibited at successive loan col-"lections, or which are now in the National "Portrait Gallery, and have traced what "appear to be indisputable signs of one pre-"dominant type of face supplanting another. "For instance, the features of the men painted "by and about the time of Holbein, have "usually high cheek-bones, long upper lips, thin "eyebrows, and lank hair. It would be im-"possible, I think, for the majority of modern "Englishmen so to dress themselves and clip "and arrange their hair as to look like the "majority of these portraits." - Inquiries into Human Faculty, p. 6.

APPENDIX

To Chap. VIII.

"BRITISH CALIBRE."

From The Times of Sept. 24th, 1885.

"The record we print to-day of the pro"ceedings shows that the final report of the
"Anthropometric Committee (of the British
"Association) was read on Saturday. This
"report is one that will appeal to everyone,
"and is a fine illustration of the real work
"which is being carried on by the Association,
"the results of which are only briefly told at
"the annual meetings. In itself it is a strik"ing illustration of the application of rigidly
"scientific method to the most ordinary and
"commonplace operations, and of the vast
"amount of research into apparently trivial
"points which the real scientific worker must

"institute before he is able to discover a few apparently simple facts.

"The Anthopometric Committee have been "at work for some years, and have produced "annual reports. The report of the present "year is their final one, though they admit "that they are only on the threshold of their "research, and have merely provided a solid " point d'appui for further operations. As the "title of the Committee shows, the object of "its appointment was for the measurement of "men-the people, in fact, of these islands. "'The Committee was appointed for the pur-"pose of collecting observations in the syste-" matic examination of the height, weight, and "other physical characteristics of the inhabit-"ants of the British Isles.' The fact is that "all sorts of measurements were taken of "people of all classes, of all ages, of both "sexes, living in all parts of Great Britain, "but only to a small extent in Ireland. Not "only have the Committee been taking our "heights and weights, but the dimensions of "chests and heads and of all our limbs, our "heights sitting and standing, the stretch of

"our arms, the colour of our hair and eyes "and their various combinations (complexion, "in short), our strength as measured by power "to pull an ingenious spring apparatus, rate "of growth of children, and many other " points.

"Probably the first and main object in view "in the appointment of this committee was "ethnological; to discover whether the vari-"ous elements that have contributed to the "formation of this nation have left any "marked racial characteristics upon the present "population. We know pretty well what have "been the leading racial elements that have "contributed to the population of these islands. "We know that before a Celt sighted the "cliffs of Dover Britain was occupied by a "people quite unlike either Celt or Saxon-"a short, long-headed, dark, curly-haired race, "whose remains have been abundantly found "in the long barrows. And even they, in all "probability, were not the first occupants of "our islands, for the caves and river-drifts "have revealed the remains of a people of "quite different type and more civilization,

"though to what extent they have contributed "to the population may probably never be dis-"covered. When the Celts appeared it is " likely enough that they treated the curly-"haired race pretty much as the Saxons "treated themselves, and drove them back "into the remote and inaccessible parts of "the islands; though, to judge from the "mixed features almost everywhere found, "there must have been considerable mixture "of the two races. But that the Celts, in "their two types, Gael and Cymri, in the "end spread themselves over nearly the whole "of the islands, there is little reason to "doubt. And so the Romans found them "on their arrival. The latter appear to have "made but little impression on the racial "features of the population, and it remained "for the Saxons to introduce a new element "which told powerfully on the ethnological "characteristics of the islands. We know the "directions in which they spread. We know "that the Celts were driven westwards and "northwards, towards the same regions in which "their predecessors had in the main collected.

"Wales and Strathclyde-i.e., North-West Eng-"land and South-West Scotland-formed a "refuge for the Cymri; while Northern Scot-"land remained the home of the Picts, to "whichever branch of the Celts they belonged. "Ireland remained largely Gaelic: and sent its "hordes into Western Scotland to establish "there, after four centuries, a Gaelic king-"dom. All over Southern, Eastern, and "Central England, and Southern and North-"Eastern Scotland, we should expect to find "the fair-haired, blue-eyed, large-limbed Teu-"tonic element, only slightly modified subse-"quently in some of the east-coast regions "and the extreme North and North-West of "Scotland by the Scandinavian intrusions. The "Norman invasion did not materially change "the ethnological position; it only, to a very "small extent, ousted the existing population, "contenting itself with giving us a dynasty "and an aristocracy. How, then, are we to "discover whether the characteristics which we "know marked these various elements still "survive in the districts which were finally "peopled by them? The Anthropometric

"Committee have sought to solve the pro"blem by taking a large series of minute
"measurements and observations of the leading
"features that go to make up the physical
"character of men, and comparing them with
"what we know were the racial charac"teristics of the various swarms that formed
"the original elements of the population. The
"results are of the greatest interest. Another
"Committee are collecting photographs from
"the various districts of the kingdom, and
"when their labours are complete, the com"parison of the results obtained by the two
"Committees must be very curious.

"The following, then, are the twelve points "to which the Anthropometric Committee have "mainly directed their attention:—Stature, "weight, girth of chest, colour of eyes and "hair (complexion), breathing capacity, strength "of arm, sight, span of arms, size and shape "of head, length of lower limbs as shown "by the difference between the sitting and "standing positions, girth, length and breadth "of other parts of the body. As might be "expected, the Committee found some diffi-

"culty in obtaining complete answers to all "their inquiries; but quite enough has been "obtained to justify them in coming to pro-"visional conclusions. With their own obser-"vations they have combined those previously "obtained by Dr. Beddoe* and Mr. Roberts, "so that for the leading points of their in-"quiry they have had observations on about "53,000 individuals of both sexes and all "ages. We need scarcely say the Committee "have taken the greatest precautions in col-"lecting their information, and have tabulated "and compared the results with complete in-"difference as to what might be the final con-"clusions. Into their carefully devised methods "we cannot enter, but must content ourselves "with a brief résumé of the results. As the "observations made on Irishmen were mainly "on those living in England, the conclusions "as to that country cannot be regarded so "satisfactory as those with reference to Eng-" land and Scotland.

"The first observations discussed are those

^{*} See page 230.

"relating to the stature, weight, chest-girth, "and strength of 8,585 adult males (ages "from 23 to 50) of the population of the "United Kingdom, arranged according to place "of birth. The general results of these ob-"servations are summarized as follows:-In "height the Scotch stand first (68.61 inches), "the Irish second (67.90 inches), the English "third (67:36 inches), and the Welsh last (66:66 "inches), the average of the whole being 67.66 "inches. In weight the Scotch take the "first place (165.3 lb.), the Welsh second "(158.3 lb.), the English the third (155 lb.), "and the Irish the fourth (154'1 lb.), the "average weight of the whole being 158.2 lb. "Thus the Scotch are the tallest and the "heaviest, the English take the third place in "both tables, while the position of the Welsh "and Irish is reversed; the Irish, occupying "the second place in stature, come last in "weight, and the Welsh, though lowest in "stature, stand second in weight. For each "inch of stature a Scotchman weighs 2.406 lb., "a Welshman 2.375 lb., an Englishman " 2.301 lb., and an Irishman 2.270 lb. Thus,

"then, so far as height and weight are "concerned, the Scotchman bears the palm; "but we look upon the discovery of the "British Association Committee as simply "giving the hall-mark of science to his own "instinctive conviction that he is a much "better man in all respects than the 'dause "southron.' The Committee make the im-"portant practical remark on the above results "that, if each country is to furnish its quota " of soldiers, it is obvious that the minimum "standard for Welsh recruits should be two "inches lower, and for English and Irish "recruits one inch lower, than for Scotch "recruits. Unfortunately, the chest measure-"ments taken in the above-mentioned group "are almost entirely those of Englishmen, also the figures for strength. These "measurements show that an adult English-"man of typical proportions has a stature of "5 ft. 7½ in., a chest girth of 36½ in., a weight "of 10st. 10lb., and is able to draw, as in "drawing a bow, a weight of 771 lb. On "the diagram in which all these observations "have been embodied, the curve of the

"English very nearly corresponds with that of the average of the whole kingdom, so that, in these respects at least, the Englishman is the typical Briton.

" Another series of observations refer to "the relative stature, weight, and strength of "adult males and females in England. The "average stature of adult males is 67.36 in. "and of females 62.65 in., showing a difference "of 4.71 in. The average weight of males "is 155 lb., and that of females 122.8 lb., "showing an excess of 32.2 lb., or about "21-3 stone, on the side of males. Although "the observations as to strength were not so "comprehensive as they might have been, "still they may be regarded as an approxi-"mation to the average. The difference of "strength, then, was found to be 35 lb., the "females being little more than half "strong as the males. Thus the weaker sex "have a very long leeway to make up before "they can consider themselves on such a "footing of equality with the stronger sex "as the advocates of their 'rights' maintain "they ought to have.

"One of the most interesting features of "the report is a series of shaded maps, "which present at once to the eye the rela-"tive distribution of the stature, weight, and "complexion of the adult male population in "the several counties of Great Britain and "in each province of Ireland. The results, "the Committee candidly point out, must "be accepted with a certain amount of "reservation, though they tally wonderfully "with what might be expected as the result " of the original distribution of the racial "elements of our nation. We all know how "persistent through generations are family "features, and no less persistent are the "leading characteristics of a tribe or race "often in spite of extensive intermixture. "It is only since the very recent introduction " of railways that the free intermixture of the "various sections of the population has begun "to take place; and in spite of that the "great bulk of the people probably still "continue to occupy the localities, within "narrow limits, in which their remote an-"cestors found themselves after the invasions

"and the disturbances consequent thereon "ceased. From these maps, then, we find, "in the first place, that the very tallest "men (average stature 5 ft. 91/2 in. and up-"wards) are found in the Scotch counties "of Kirkcudbright, Ayr, and Wigton on the "one side, and the three Lothians and "Berwickshire on the other. The next stage "in height, 69 in. to $69\frac{1}{2}$ in., is found to "prevail also in Scotch counties-Sutherland, "Ross and Cromarty, Skye, Perth, Stirling, "Dumbarton, Fife, Kinross, and Clackmannan, "to which, however, must be added the "North and East Ridings of Yorkshire. "All the other Scotch counties are embraced "in the heights between $67\frac{1}{2}$ in. and 69 in., "only Shetland and the Western Hebrides "coming so low as 67½ in. to 68 in. "Northumberland and the Irish Provinces of "Connaught and Munster have for their "average heights 68½ in. to 69 in. Ulster "and Leinster have for their average 68 in. "to 68½ in., in which category also are "embraced the English counties of Cumber-"land, Westmoreland, Lincoln, and Norfolk.

"The average of 67½ in. to 68 in. is dis-"tributed over the counties of Durham, "Lancashire, Derby, Stafford, Suffolk, Essex, "Kent, Berks, and Cornwall; 67 in. to " 67½ in. is found in Nottingham, Leicester, "Rutland, Northampton, Bedford, Warwick, "Worcester, Flint, Denbigh, Sussex, Hants, "Dorset, and Devon. The London average "is given separately-66.92 in. In the West "Riding, Chester, Carnarvon, Anglesea, "Merioneth, Montgomery, Cardigan, Brecon, "Radnor, Cambridge, Huntingdon, Bucks, "and Oxford, the average is found to be "66½ in. to 67 in.; and the lowest average, "66 in. to 661 in., belongs to Herts, Middle-"sex (ex-metropolitan), Surrey (ex-metro-"politan), Shropshire, Hereford, Monmouth, "Gloucester, Wilts, Somerset, Glamorgan, "Carmarthen, and Pembroke.

"The second map, on which the distri-"bution of weight is marked, shows that "weight and height do not invariably go "together. In respect of weight the Lothians "and Argyllshire bear the palm, the average "in these districts being from 175 lb. to

"180 lb. South-West Scotland and Perthshire "come in the second line with an average "of from 170 lb. to 175 lb., while the whole " of Northern Scotland comes into the third "rank, with weights from 165 lb. to 170 lb. "With the exception of the coal and iron "districts along the middle and lower course " of the Clyde, no other parts of Scotland "come below the fourth standard, 160 lb. to "165 lb.; in these districts, however, the "standard of weight is the second lowest, "155 lb. to 160 lb. The highest standard "found in England is No. 4, from 160 lb. "to 165 lb., in Northumberland, Central and "East Yorkshire, Lincoln, Norfolk and "Suffolk, Cornwall, Stafford, and North "Wales. The bulk of England-the north-"west counties, a great part of the centre "and east-Derby, Leicester, Northampton, "Worcester, Beds, Cambridge and Hunts, "Essex, with Worcester, South Wales, the "South Thames counties (except Surrey), "Kent, and the South Coast counties, with "South Wales, Ulster in Ireland, the West "Riding of York, Lancashire, Cheshire, Notts,

"Durham, Oxford and Bucks, Hereford and "Monmouth, Herts and Middlesex, with "Connaught and Munster, all come within "Standard 6—150 lb. to 155 lb. London has "for its standard weight 152.9 lb. Surrey, "Warwick, Shropshire, Gloucester, and Somer-"set, with Ulster, fall to the lowest standard, "145 lb. to 150 lb.

"Other three maps are devoted to the distribution of the leading complexions—(1) fair—i.e., light eyes and light hair; (2) dark—dark eyes and dark hair; (3) fair eyes and dark hair. From a purely ethno-logical point of view these three maps are perhaps the most interesting. Over all, there seems no doubt, the lighter complexions prevail, though there is a large percentage of dark complexions, stretching in a band across the centre of England and Wales, running south-east into Essex, and in Kent, Sussex, and Hants.

"The ethnological results of the inquiry are well stated by Dr. Beddoe, the Committee expressing the opinion that the variations in the various features appear to be chiefly

"due to difference of racial origin, the influ-"ence predominating over all the others. Dr.

"Beddoe says:—

"'We have reason to believe, from historical and "'antiquarian researches, that the ancient Caledonii, the "'Belgæ and Cimbri, and the Saxons and Frisians, as "'well as the Danes and Normans, were all people of "'great stature. On the other hand, the prehistoric "'(neolithic) race or races in Britain appear to have "'been of low or moderate stature. Accordingly the "'higher statures are found in the Pictish or Cimbro-"'British districts of Galloway; in the Anglo-Danish "'ones of North and East Yorkshire, Westmoreland and "'Lincolnshire, and in Cumberland, whose people are "'ethnologically intermediate between the two. Lothian "'and Berwickshire are mainly Anglian, while the Perth-"'shire Highlanders are the most clearly identified as "'the descendants of the Caledonii. The high position "' of Norfolk in the list is due to a large admixture of "'Danish blood on the coast. There is a fringe of "' moderately high stature all round the coast from Nor-"'folk to Cornwall, while the inland people, retaining "' more of the ancient British blood, yield lower averages. "' Middlesex and Hertfordshire, which stand very low, "'were later and less perfectly colonized by the Anglo-"'Saxon than the surrounding counties, and nearly the "'same may be said of the counties around the Severn "'estuary and the Welsh border. Cornwall stands higher "' than the surrounding counties, and this is probably due to "'its having become the refuge of the military class of "'Southern Britain, in the main of Belgic origin. Flint

"'and Denbigh owe their superiority to the other Welsh "'counties to the immigration of the Cumbrian and "'Strathclyde Britons."

"Again the Committee say :-

"'The racial elements of the British population are "best demonstrated by separating a few of the counties "where there has been the least admixture of foreign blood, and comparing these together, thus:—

DISTRICT.	STATURE.	WEIGHT.
. Cardigan, Radnor, and Brecon . Sussex, Berkshire, and Oxford-	66.59	169.3
shire	67:22	155.8
Norfolk	68.73	166.7
East Yorkshire, and Lincoln-		162.7
	Cardigan, Radnor, and Brecon . Sussex, Berkshire, and Oxfordshire Lothians, Northumberland, and Norfolk Shetland, Caithness, North and	Cardigan, Radnor, and Brecon . 66·59 Sussex, Berkshire, and Oxfordshire 67·22 Lothians, Northumberland, and Norfolk 68·73 Shetland, Caithness, North and East Yorkshire, and Lincoln-

"These, then, are the leading ethnological results of the Committee's labours, and they are solid and interesting enough to justify its appointment. But there are other issues which render this report of many-sided importance, and of immense practical value from a hygienic and sanitary point of view.

"few of these side results. With regard to "geographical distribution, for example, it has "been found that the inhabitants of the "more elevated districts possess a greater "stature than those of the alluvial plains, "and the inhabitants of the northern and "colder districts than those of the southern "and warmer parts of the island; those of "the north-eastern and drier regions are taller "than those of the south-western and damper "climates. A special table is devoted to a "comparison of the average stature of adult "males in the United Kingdom with that of "adult males of American and European "origin who were examined for admission "to the United States Army in 1863-4, the "result being to show, not that the Anglo-"Saxon race in America reaches a higher "stature than in England, as has been main-"tained by some American writers, but that "there is a close correspondence between the "two groups. A still more interesting table "compares British stature with that of all "other nationalities, from Polynesians to "Bushmen. The result is that, with the

"exception of a few imperfectly observed "South Sea Islanders, the English professional "class head the long list, and that the "Anglo-Saxon race takes the chief place in "it among the civilized communities, although "it is possible it might stand second to the "Scandinavian countries if a fair sample of "their population were obtained. The Poly-"nesians lead the way with an average "stature of 5 ft. 9.33 in., closely followed by "the English professional class with 5 ft. "9'14 in. of average stature. Next come the "Patagonians, 5 ft. 9 in.; the Angamis of the "Naga Hills, 5 ft. 9 in.; negroes of the "Congo, 5 ft. 8.95 in.; and after these "Scotch of all classes, 5 ft. 8.71 in. At the " bottom of the list stand the Bushmen, with an " average height of 4 ft. 4.78 in. The difference "between the tallest and shortest races is " I ft. 4.55 in., and the average height of man, "according to this table, is 5 ft. 51 in.

"Among other special subjects of inquiry by the Committee were the physical difference of (a) persons engaged in different coccupations, (b) persons bred or living in

"towns and country, (c) natives of parts of "the British Isles differing ethnologically, "geologically, or in climate, (d) boys and "men whose intellect and industry are above "or below the average, (e) the general cha-"racteristics of men noted for their athletic "powers, (f) the rate of growth in persons " of both sexes in town and country, and "engaged in different occupations. It comes "out very clearly that an open-air country "life is much more favourable to height and "weight than a sedentary town life, and that "favourable hygienic and sanitary conditions "have a marked influence on growth and "weight. At the top in this respect are the "Scotch agricultural population of Galloway, "with average height 5 ft. 101 in. and weight "173.6 lb., closely followed by the Metro-"politan Police, a carefully-selected body of "men, with average height 5 ft. 10.1 in. and "weight 185.7 lb. In Galloway the influence " of race may prevail, as we find the lead "miners of Wanlockhead, in the same dis-"trict, notwithstanding their unhealthy occupa-"tion for generations, reaching an average

"height of 5 ft. 8.43 in. and weight 163.9 lb., "while the Welsh lead miners have an average height less by 2.13 in. and weight less by 8.7 lb.

"If the results of the Committee's inquiries "as to criminals and lunatics can be altogether "accepted, they may prove suggestive to those "practically interested in the improvement of "both classes. When compared with the "general population, lunatics show a deficiency " of stature of 1.96 in. and of weight 10.3 lb.; "and criminals of 2.06 in. and 17.8 lb., indicat-"ing, according to the Committee, a deficiency " of physical as well as mental stamina in "both these unfortunate classes of society. "The average stature of athletes exceeds that " of the general population by 0.68 in., while "their average weight falls short of that "standard by 14.5 lb. Thus, a trained athlete "whose stature is 5ft. 7in. should weigh 10st., "while an untrained man of the same height "should weigh 11st. The result of the in-" quiry into the influence of age, sex, nurture, "occupation, and sanitary surroundings on the "physical development of the British popula-

"tion deserves the serious attention of all "interested in the improvement of our race. "The most obvious facts which the figures "disclose are the check which growth receives "as we descend lower and lower in the social "scale, and that a difference of 5 in. exists "between the average statures of the best and "worst nurtured classes of children of corre-"sponding ages, and of $3\frac{1}{2}$ in. in adults. One "very curious remark is suggested with regard "to the observations on the size and weight " of new-born infants. It would appear, accord-"ing to the Committee, that the physical (and "most probably the mental) proportions of "a race, and their uniformity within certain "limits, are largely dependent on the size of "the female pelvis, which acts as a gauge, as "it were, of the race, and eliminates the "largest infants, especially those with large "heads (and presumably more brains), by "preventing their survival at birth. This, "however, must be regarded as simply a con-"jecture, but the point is worthy of precise "investigation. A long series of tables and "curves is summed up as follows: - (1)

"Growth is most rapid during the first five "years of life; the observations, however, at "those ages are not sufficient in number or "variety to give a trustworthy average. (2) "From birth to the age of five years the "rate of growth is the same in both sexes, "girls being a little shorter in stature and "lighter in weight than boys. (3) From five "to ten years boys grow a little more rapidly "than girls, the difference being apparently "due to a check in the growth of girls at "these ages. (4) From 10 to 15 years girls "grow more rapidly than boys, and at the "ages of 111 to 141 are actually taller, and "from 121 to 151 years actually heavier than "boys. This difference appears to be due to "a check in the growth of boys as well as to "an acceleration in the growth of girls inci-"dent on the accession of puberty. (5) From "15 to 20 years boys again take the lead, "and grow at first rapidly, and gradually "slower, and complete their growth at about "23 years. After 15, girls grow very slowly, "and attain their full stature about the 20th "year. (6) The tracings and tables show a

"slow but steady increase in stature up to the "50th year, and a more rapid increase in "weight up to the 60th year in males, but "the statistics of females are too few after the "age of 23 to determine the stature and "weight of that sex at the more advanced " periods of life. (7) The curve of the chest-"girth in males shows an increase at a rate "similar to that of the weight up to the age "of 50 years, but it appears to have no "definite relation to the curve of stature. (8) "The strength of males increases rapidly from "12 to 19 years, and at a rate similar to that "of the weight; more slowly and regularly "up to 30 years, after which it declines at an "increasing rate to the age of 60 years. The "strength of females increases at a more uni-"form rate from 9 to 19 years, more slowly " to 30, after which it falls off in a manner "similar to that of males. The curves of "strength for the two sexes are not parallel; "at II years females are weaker than males "by 22lb., at 20 years of age by 36lb. The "fact that man continues to grow in stature "up to his 50th year goes right in the face

"of all popular notions on the subject, accord-"ing to which he has ceased to grow before "he reaches half that age.

"Only one other point can we refer to. "The supposed degeneracy of the population "of our manufacturing towns is frequently "lamented; but the Committee, by comparing "their own with previous observations, have "come to the conclusion that in spite of their "unfavourable surroundings, these classes are "not degenerating, but that, on the contrary, "a slight but uniform increase in stature and "a very large increase in weight is observable. "Such then are the leading points or con-"clusions of this most suggestive inquiry. We "have been weighed and measured and have "not been found wanting; in spite of many "drawbacks in the surroundings of large sec-"tions of our population we, on the whole, "keep the lead of all civilized nations in "height and weight, lung capacity, and strength "of arm. The exact influence in inches and "pounds of the special surroundings which "affect different classes have been tabulated "by the Committee; the results are at least

"worthy of the study of all interested in sanitary science and practice. The whole in"vestigation is creditable in the highest degree to the Committee, and especially to Mr. C.

Roberts and Sir Rawson Rawson, who have drawn up the report. So long as the British Association spends its money in endowing committees to carry on investigations of this kind it will have a sufficient raison d'être.

To quote one of the concluding sentences of the report:—

"'The Committee believes that it has laid a substantial "'foundation for a further and more exhaustive study of "the physical condition of a people by anthropometric "methods, and that its action will prove it has been "useful as an example to other scientific societies and "to individuals in stimulating them, as well as directing "them, in the methods of making statistical inquiries "relative to social questions."

A most important work has lately been published,— The Races of Britain; A Contribution to the Anthropology of Western Europe. By John Beddoe, M.D., F.R.S., etc., 1885,—which will be found of the greatest

value to the student of temperament. It is full of maps and tables, which give Dr. Beddoe's personal observation of the colours of the hair and eyes, the forms of the features, the head-forms of the different races, and the prevailing colours and forms in many districts and counties of the three kingdoms, and parts of the Continent.

There are three pages of faces, all admirably characteristic of the type of face which prevails in districts at home where one or other of the races is still met with comparatively pure; and as the colour, form, and other physical characteristics are given in the text, students who have become familiar with the scheme of the four temperaments (chap. iv.), will at once see the people of these districts with the mind's eye, and read their temperaments by inferring their mental from their physical characteristics.

Dr. Beddoe's first work—Contributions to Scottish Ethnology, 1853—may be said to have originated precise observation of physical characteristics; a field now occupied by eminent workers at home and abroad, in which, however, he has always been one of the most eager and careful.

Although the results of his observations "have been extensively utilized" by the Anthropometric Report of the British Association, the more complete record given in the volume now published renders it indispensable to students of history, character, and temperament, and it will be invaluable as a work of reference through future ages.

Dr. Beddoe's own estimate of its value in that respect is fully warranted:—

"The ever-increasing rapidity of local migra-"tion and intermixture, due to the extension "of railways and the altered conditions of society, "will in the next generation almost inextricably confuse the limits and proportions of the British races; and it is a source of satisfaction to me that I have laboured to seize on fleeting opportunities, and to observe and record phenomena, which, however trivial they may appear from some points of view, may for generations to come retain some biological and historical value."

Much of Dr. Beddoe's method of observing racial colour characteristics may well be followed by the observer of temperament:—

"When engaged in this work I set down in his proper place on my card of observation every person (with the exceptions to be mentioned presently) whom I meet or who passes me within a short distance, say from one to three yards. . . I neglect those whom I suppose to be under age—fixing the point roughly at eighteen or twenty for men, seventeen or eighteen for women,—as well as all those whose hair has begun to grizzle.

"Thus I get a fairly uniform material to work "upon, though doubtless the hair of most "people does darken considerably between "twenty and forty or fifty. In order to "preserve perfect fairness, I always examine "first, out of any group of persons, the one "who is nearest, rather than the one to "whom my attention is most drawn. Certain "colours of the hair, such as red; certain "shades of the eye, such as light grey, can be "discerned at a very considerable distance; but "I take no note of any one who does not "approach me so nearly that I can recognise "the more obscure colours. Much allowance "needs to be made for the varying effects of "light. Direct sunlight is better avoided when "possible; I always choose the shady side of "a street on a sunny day. Considerable diffi-"culties are created by the freaks of fashion. "I once visited Friesland, in order to study "the physical type of that region. Conceive "my disappointment when I found myself "surrounded by comely damsels and buxom "matrons, not one of whom suffered a single "yellow hair to stray beyond her lace cap or

"silver-gilt head-plate. When I began to work in England dark hair was in fashion among the women; and light and reddish hues were dulled with greasy unguents. In later years fair hair has been more in vogue; and golden shades, sometimes unknown to nature, are produced by art. Among men, on the other hand, the close cropping of the head, borrowed from the French, makes comparisons difficult. Fortunately, most vagaries of this kind are little prevalent in the classes among whom I seek my material. As a rule, I take no note of persons who apparently belong to the upper classes, as these are more migratory and more often mixed in blood."

In the foregoing extract Dr. Beddoe refers to colour characteristics only. The chief form characteristics of race he measures carefully, and, therefore, cannot ascertain in his walks.

The experienced observer of temperament seldom fails to recognize its form as well as its colour characteristics by little more than a glance, and may therefore at once assign the temperament, whether pure or compound, of any one who may be sufficiently near.

Sometimes, however, there are obstacles in the way. He may not be always able in his walks to see with certainty the exact form of the forehead; and beard and dress often render doubtful two chief temperament characteristics—form of chin, and length of neck.

CHAPTER IX.

THE ORGANS OF THE TEMPERAMENTS.

The four temperaments named after four internal organs of the body.-The four organs, and their influence on the mental action of the four temperaments.-Relation of the four temperaments to the causes of disease.-Food and the temperaments.—Climate and the temperaments. -Effects on Dickens of a month at Bonchurch, Isle of Wight. — Quotations showing the dependence of the natural mental action of the temperaments on the healthy action of the organs.-Return of natural mental action with convalescence. -The temperaments and minute structure. - Inheritance of disease limited by personal likeness. - Importance of such limitation in Life Assurance.

THE four pure or standard temperaments are named after the four chief organs of the body, and it is an

essential part of the doctrine of the temperaments that every temperament is specially influenced by the organ after which it is named.

The four organs of the temperaments are:-

The Heart or Blood . The Sanguine Temperament.

The Liver or Bile . . The Bilious Temperament.

The Lymphatic system. The Lymphatic Temperament.

The Nervous system . The Nervous Temperament.

The following quotation expresses the general influence of the organs on physical and mental characteristics:-

"The predominance of any particular system " of organs modifies the whole economy, "impresses striking differences in the results "of the organization, and has perhaps almost as great an influence on the moral and intellectual as on the physical faculties. This prominence establishes the temperament; it is the cause of it, and constitutes its essence."—Art. "Temperament" in Penny Cyclopædia.

Organization is sometimes used instead of temperament, and as it has an obvious and a definite meaning and is often the better term, it would be well were it more frequently used; but, as with temperament, precision of meaning requires the kind of organization to be added:—

A sanguine organization.

A bilious ,

A lymphatic ,,

A nervous ,,

I noted its use in place of temperament by Sir F. Leighton, in one of his annual addresses to the students of the Royal Academy of Arts.

"I wish," he said, "to seek with you the "solution of certain perplexities and doubts "which will often, in these days of restless "self-questioning, arise in the minds and weigh on the hearts of students who think as well as work. These perplexities, which few are fortunate enough wholly to escape, arise sooner in some and later in other organizations."

I give a brief account of the four organs, and of their influence on the characteristics of the temperaments, but the student of temperament would do well to gain further information on this important part of the subject.

THE BLOOD AND THE SANGUINE TEMPERAMENT.

The blood consists chiefly of small red corpuscles floating in a clear, colourless

THE ORGANS OF THE TEMPERAMENTS. 241

fluid—serum; and the florid complexion, the more impulsive mental action and energetic manner of those of the sanguine temperament, and the greater activity of all their bodily functions, are no doubt chiefly owing to the skin, the brain, and the other internal organs being more freely supplied with blood, in which probably the red corpuscles are in excess.

In a contribution, "The Analysis of the Human Blood," by Dr. George Martin, in *Medical Essays and Observations*, vol. ii., 1771, is a section entitled

"OF THE TEMPERAMENTS DENOMI"NATED FROM THE CONSTITUENT
"PARTS OF THE BLOOD,"

in which it is said:-

"If the blood be plentiful, and abound with red globules, such a state will plainly enough constitute what the antients called

" 'temperamentum sanguineum'; the symptoms "whereof are easily explained from these " circumstances."

THE BILE AND THE BILIOUS TEMPERAMENT.

The organ of the bilious temperament is the liver, but the temperament takes its name from its product—the bile which has important uses in digestion, and, as is well known, is a dark-yellow, bitter, and acrid fluid.

As the florid complexion and the mental characteristics of the sanguine temperament depend on the red corpuscles of the blood, so the dark complexion and the mental characteristics of the bilious temperament may depend on the presence, at all times, of more or less bile in the blood. Its natural flow or course being arrested, it often finds its way into the

THE ORGANS OF THE TEMPERAMENTS. 243

blood too largely, darkens the complexion unnaturally, and makes things seen with "a jaundiced eye."

"All seems infected that th' infected spy,
As all seems yellow to the jaundic'd eye."

POPE.

Carlyle says of himself:-

"I am a very unthankful, ill-conditioned, bilious, wayward, and heartworn son of Adam, I do suspect";

and it is said of him :-

"Carlyle's hatred of democracy was in a "great measure but the bigotry of bile."

THE LYMPHATIC SYSTEM AND THE LYMPHATIC TEMPERAMENT.

The lymphatic system, after which the lymphatic temperament is named, consists of small vessels or tubes, everywhere throughout the body, which take up

from certain parts of the alimentary or digestive canal, a rich milky fluid—chyle,—and from the rest of the body a clear, colourless fluid,—lymph,—and pour both into the blood, near the heart.

In composition and in appearance lymph resembles the serum of the blood, but it is more watery.

The lymphatic is called by some the serous temperament. It is so by Dr. Thomas Mayo, in his "Elements of "the Pathology of the Human Mind," 1838. But as lymph and the serum of the blood are not exactly alike, and it is not serum but lymph that circulates in the lymphatics, the old name is more in harmony with the names of the other temperaments.

It may be accepted that in the lymphatic temperament there is a greater proportion of water in the tissues of the body. THE ORGANS OF THE TEMPERAMENTS. 245

Dr. Southey says:-

"The lymphatic are short-lived, and have "elements of inherent debility about them. "The constructive fault in them appears to be a capacity and a proclivity to combine and appropriate more water than is required for the perfect nutrition of their tissues, the error being an increase in the size of parts rather than their solidity." — The Lancet, vol. i., 1876.

Dr. Martin, previously quoted (p. 241), says:—

"When the red globules were scarce in the blood, and it was found thin and watery, this was called a phlegmatic (lymphatic) temperament."

Recent analysis of the blood in the different temperaments, by French chemists, confirms the old observation that it is more watery in the lymphatic than the other temperaments, and shows that the

blood of women contains more water than that of men.

Dr. Jaeger, Professor of Zoology and Physiology at Stuttgart, found, by testing, that the body becomes specifically light through excess of water or fat, and that in the same proportion the nervous action is impeded or slow; that in one instance the water in the body having been lessened by a Turkish bath, the rapidity of nervous action increased to the extent of 13 per cent.—The Times, Oct. 4th, 1884: " Sanitary Clothing."

It is therefore a warrantable conclusion that the slowness, the inactivity, the love of ease, the colourless complexion, and the other characteristics assigned in the scheme to the lymphatic temperament, are the result of enfeebled organic action from diluted blood and watery nerves and tissues.

THE NERVOUS SYSTEM AND THE NERVOUS TEMPERAMENT.

The nervous system, after which the nervous temperament is named, consists of the nerves, and their centres,—the brain and spinal cord.

Issuing from their centres, the nerves are distributed to every part of the body, and not only bestow sensation everywhere, but convey messages to and from their centres, and call into action every movement of every part of the body.

In the nervous temperament—the face tapering from a high or broad forehead, small features, long neck, and slim build—the action of the nervous system is accelerated, and in consequence, sensation is heightened, and perception, thought, and resulting speech are more rapid than

in the other temperaments. See chap. vi., page 137.

There is abundant professional proof of the greater liability of every pure temperament to derangement of its special organ,—of the circulation in the sanguine; the bile in the bilious; the glandular or lymphatic system in the lymphatic; and the nervous system in the nervous,—and were authors of works on the practice of medicine to name in their descriptions the temperament of those who are specially susceptible to any of the causes of disease, they might greatly promote the public health.

Practical acquaintance with the temperaments would then enable every one to guard himself and others against the diseases to which they are naturally liable.

Professor Laycock, in his lectures on temperament, etc., says:—

"It is the most common observation that "the same exciting cause of disease, or the "same remedy, operates very variously upon "different individuals (temperaments in con-"text), even of the same age and sex."—

Medical Times and Gazette.

It would be important to every one were the different relations of the four temperaments to food and climate, and their susceptibilities to the well-known causes of derangement of health carefully studied and made generally known, as the few following observations may show.

FOOD AND THE TEMPERAMENTS.

Every one knows that there are hearty eaters who can eat and digest every kind of food, and that there are small eaters who have found by experience that they must be very careful what they eat lest indigestion follow: that many can take a moderate quantity of wine and other stimulants daily, apparently with benefit:

while not a few are unable to take even the smallest quantity without subsequent discomfort. And so with fat and rich dishes—that some trim every particle of fat off, and that others eat, enjoy, and digest it.

Observation would probably establish that the temperaments indicate these and other differences as regards food and digestion.

The nervous man, with tapering face and slim frame, has certainly a less capacity for food than the sanguine, the bilious, or the lymphatic, and if engrossed by a profession or business may soon become dyspeptic and sleepless, and obliged to live strictly by rule.

In contrast; the lymphatic man eats largely and indiscriminately; is the onemeal-a-day man we hear of; loves after THE ORGANS OF THE TEMPERAMENTS. 251

dinner to linger over his port and smoke away the rest of the evening. He wakes in the morning to find that he has had a ten hours' sleep, and could enjoy an hour or two more.

Those of the sanguine and bilious temperaments have a somewhat less capacity for food than the lymphatic, but, like them, can take wine and other stimulants freely—the bilious more so than the sanguine.

They digest well and sleep well.

In his contribution to Guy's Hospital Reports, Dr. Wilks quotes from the Saturday Review what I have, as yet, had no opportunity of proving:—

"A hospitable gentleman one day informed his butler that six clergymen were going to dine with him, and desired him to make due preparation. 'May I ask, sir,' deferentially replied the latter, 'whether they

"'are 'Igh or Low Church?' 'What on "earth makes you ask such a question?" "'Because, sir, you see if they are 'Igh "'they drink, and if they're Low they eat."

CLIMATE AND THE TEMPERAMENTS.

Although everyone knows that the same place suits some persons well and that others cannot live in it, the relation between climate, as between food and different individuals, has not been observed, and everyone has to find out by experience whether a place suits him.

Observation would, I think, establish the temperaments as guides, and were they so established, the mistake now made by many of visiting or settling where they cannot stay without loss of energy and strength, and, in some cases, serious derangement of the organs, would be avoided.

Dickens, whose temperament was probably a compound one—bilious, sanguine, and nervous—would have been saved a month of continuous misery had the unsuitability of certain climates to certain temperaments been studied and made known.

In a long letter to Mr. Forster, he describes, in his inimitable way, with a minuteness rivalling Hippocrates himself, how a month's stay at Bonchurch, Isle of Wight, affected him and others of the party.

He writes in the third person, and I quote detached sentences:—

"The first effect is an almost constant feeling of sickness, accompanied with great prostration of strength, an extraordinary disposition to sleep, except at night, and if he have anything to do requiring thought and attention, this overpowers him to such

"a degree that he can only do it in "snatches, lying down on beds in the fitful "intervals. Extreme depression of mind, and "a disposition to shed tears from morning to "night, develops itself at the same period. "If he happens ever to have possessed any "energy of any kind, he finds it quenched "in a dull, stupid languor. He has no " purpose, power, or object in existence what-"ever. When he brushes his hair in the "morning he is so weak that he is obliged "to sit in a chair to do it. He is incap-"able of reading at all times, and his bilious "system is so utterly overthrown, that a ball "of boiling fat appears to be always behind "the top of the bridge of his nose, simmer-"ing between his haggard eyes." . . .

"I am quite convinced that I should die here in a year. When I leave at the end of this September I must go down to some cold place, as Ramsgate, for example, for a week or two, or I seriously believe I shall find the effects of it for a long time."

Mr. Forster adds:-

"These were grave imputations against one of the prettiest places in England, but of the generally depressing influence of that Undercliff, on particular temperaments, I had enough experience to abate some of the surprise with which I read the letter."

Difference in their organization is no doubt the reason why men in health are differently acted on by food and climate, and differ in susceptibility to the ordinary causes of disease; the mental as well as the bodily effects of which are, to the professional observer, a study of change in the action of the organs, probably begun in the organ of the temperament.

The influence of organic on mental action may be briefly noticed. When the circulation is checked, and the blood driven from the surface by cold, mental action is also checked. The effects of great heat on the organs, and through them on mental action, are thus noted by Dr. Wilks:—

"In the late hot summer (1868) gastric and hepatic (stomach and liver) disturbances were rife, and as regarded physical and mental energy we constantly heard the remark that less work could be done, and some even gained an insight into the pleasures of sitting cross-legged all day long, drinking coffee and smoking a hookah."

The effects of altered action of the organs on mental characteristics are thus stated by Dr. Pritchard:—

"Changes in the habitual state of the dis-"position, and of the instincts and tendencies "to action, are induced by manifest causes "affecting the physical or organic functions."

"The states of the digestive organs influ"ence the temper in a very sensible manner.

"Hunger or long fasting exasperates the fero"city of beasts of prey; the effect of a

"full meal is well known to modify the
"disposition in a reverse way; the inclina-

THE ORGANS OF THE TEMPERAMENTS. 257

"tions are changed by the influence of wine "and stimulants; cowards become valiant, "and the timid and reserved loquacious."— Cyclopædia of Practical Medicine.

In a recent address (Sept. 1882) by Sir Rutherford Alcock, the influence of the organs on mental action is fully recognized:—

"As the bodily organs unquestionably did influence the mind, and might enfeeble or distort the judgment, whatever tended to maintain a fair standard of health added essentially to the sum of human happiness and good judgment. A good digestion, therefore, they might fairly conclude, was quite as necessary as a good conscience."

The following extract from The Times also shows how essential good health is to natural mental action:—

"One of the most advanced thinkers and "men of science of our time has frankly "admitted that his theological views are considerably modified by the state of his health; and if one's ideas on futurity are thus affected, it is no wonder that things of this world wear a different aspect when viewed from a sick-bed."—"Invalid Literature," August 31st, 1881.

The following, quoted from one of Robertson's sermons by Dr. Wilks, was probably influenced by nervousness:—

"We are fearfully and wonderfully made.

"Of that constitution which we, in our
ignorance, call union of soul and body,
we know little, except of what is cause
and what effect. We would fain believe
that the mind has power over the body,
but it is just as true that the body rules
the mind. Causes apparently the most
trivial—a heated room, want of exercise, a
sunless day, a northern aspect—will make
all the difference between happiness and
unhappiness, between faith and doubt, be-

"there is something humiliating in being thus at the mercy of our animal organism. "We would fain find nobler causes for our emotions as well as our sublimest sorrows. It is a duty, therefore, to keep the body in temperance, soberness, and chastity; to guard it from pernicious influence, and to obey the laws of health, are just as much religious as moral duties."

The following from *The Observer* (Oct. 19th, 1884) assumes that ill-health may influence the character of an author's works:—

"Though Mr. Froude does not enlighten us much on the matter, it has struck us cocasionally that Carlyle's hatred of democracy was in great measure but the bigotry of bile. . . . We must not, in reading his railings against things in general, forget that the prophet had a dyspeptic stomach."

As bile and dyspeptic stomachs are not

uncommon, their influence may be widespread, and pervade and embitter not only the works of authors, but the utterances of public men and the expression of opinion in ordinary conversation.

Never more perhaps than when convalescent from an illness which overpowered all thought and interest, is it felt how dependent natural mental action is on the healthy action of the organs.

As day by day the temperature of the body becomes lower, and the pulse falls, and the appetite and sleep and muscular power return, it is felt that day by day the mind as well as the body is becoming able for, and returning with zest to, its former enjoyments.

It remains to be noticed that competent thinkers believe that difference in minute the organs of the temperaments. 261 structure accounts for the difference between men in everything that is expressed by temperament.

Sir James Paget says:—

"The inheritance of likeness in disease or "liability to disease is indeed clear evidence "of the transmission of likeness in the very "minutest structure and composition."—The Bradshaw Lecture, 1882.

Dr. Dyce Duckworth, in an address given in 1883, says:—

"One cannot doubt that these likenesses of feature and character have also as exactly reproduced counterparts in the several bodily tissues, with the same potential qualities as to evolution, and the same tendencies to break down in similar lines of decay."

If so, it follows that a son or daughter who greatly resembles one parent and is quite unlike the other, inherits the constitution and predisposition to disease of the former only.

Some proof of this may be found in the similar history of disease in twins who were alike (page 39), but it is a subject which seems to have a wide interest, and to call for the fullest inquiry.

The shadow of inherited insanity, with its social darkenings, would be removed from half of those it follows, were the probability made a certainty, that features altogether unlike carry freedom from inheritance.

Life Assurance Offices in refusing to insure a life if either parent has suffered from a disease that is hereditary, may be doing an injustice to a son or a daughter who inherits none of the parent's features.

A son or a daughter, having only Sanguine, Bilious, or Lymphatic physical characteristics, whose father or mother, having those of the Nervous temperament, suffered or died from a disease of the nervous system—paralysis or any other—is probably as good a life for insurance as if there were no such record of disease, and I am hopeful that inquiry may confirm the inference drawn from Dr. Duckworth's argument, and that comparison of features may come to be considered essential when in Life Assurance there is a history of transmissible disease.



PART II. THE TEACHING OF THE TEMPERAMENTS.



CHAPTER X.

THE TEMPERAMENTS AVAILABLE IN EDUCATION.

Preparation for competitive examinations often injurious to health.—Dr. J. Crichton Browne's views.—How the danger may be avoided.—Letter from Mrs. Elizabeth Garrett Anderson, M.D., on "Examinations for Girls."—Dr. Carver, late of Dulwich College, on the importance of the careful study of the aptitudes of each boy.—Their study facilitated by masters and parents becoming acquainted with the temperaments.—How parents may modify the mental action of their children's temperaments.

Appendix. Thoughts on Education.--From The Spectator.

A CRY has arisen, and none too soon, that the brain is being overtaxed by education, and that in

consequence physical development is in many instances retarded; that it is often necessary to stop brain-work altogether for a considerable time; and that sometimes a break-down of the constitution occurs, so complete that recovery is hopeless.

The following is from "Education and the Nervous System," by J. Crichton Browne, M.D., LL.D., F.R.S., in The Book of Health, p. 269:-

"The epidemic of examinations which has "overrun the country deserves a fuller exa-"mination than can be granted here. It "threatens to defeat all the objects of those "who have been most zealous in advancing "education, for it must, if unchecked, blight " all true education, while at the same time "it cannot fail to make serious inroads on "the health of the people.

"It is upon the most sensitive and refined

THE TEMPERAMENTS AND EDUCATION. 269

"-the nervous and conscientious-that com-"petitive examinations exert their worst effects.

"In the case of girls, in whom emulation is generally intensively active, examinations must be very jealously watched."

As the system of competitive examinations is not likely to be superseded, a question of the highest importance presents itself: must its perils to health continue, or can they be prevented?

I think they can by selecting for special study subjects in harmony with the temperaments, the physical and mental characteristics of which should be well considered.

As the more congenial the study the less will be the friction and wear, surely subjects that are learned with difficulty, and are no sooner learned than they begin to be forgotten, should be avoided,

and those in harmony with likings and aptitudes be chiefly cultivated.

Here are the results of one of the Cambridge University higher local examinations:-

"The candidates examined numbered 811, "and of these only 209 failed to obtain a "pass in one or other group; 153 passed "in divinity; 319 in English subjects; 182 "in languages; 45 in the arithmetic and "mathematical group; 128 in political eco-"nomy, logic, and history section; 73 passed "in group A, which comprises botany, geo-"logy, zoology, physiology, and physics; 11 "passed in music.

"Nearly all the candidates in this exami-"nation were women.

"Some passed in several groups."

Eleven only passed in music! leaving nearly eight hundred failures, including those who did not attempt to pass.

As nearly all the candidates were women, and the fondest hope of mothers is that their daughters play well, there can be little doubt that nearly all the eight hundred and eleven had been kept at musical practice every day for years, although, as proved by the results of the examinations, probably only eleven had any special aptitude for music.

It would surely be well that should the want of such special aptitude in any one be ascertained, most of the time devoted to music were given to one or more subjects for which there is aptitude and liking.

On all who are preparing themselves for these examinations I cannot urge too strongly the importance of selecting, for special study and examination, one of the subjects in group A—botany, geology, zoology, physiology, and physics.

The study of any of the five subjects of the group, by occupying the senses, tempers the strain of studies that are sedentary, wholly intellectual, and therefore more difficult to be stored in the memory for instant recall.

Since the foregoing was read (January 10th, 1881), a letter from Mrs. Elizabeth Garret Anderson, M.D., appeared in The Times (February 17th, 1881), on "Examinations for Girls," and as in it she expresses her decided opinion that the study required to pass such examinations is perfectly safe if commenced at an early age, I quote the greater part of it:-

"One of the great advantages of the "Cambridge course, as followed at Girton "College, where students must be eighteen "before they enter, is that it does postpone "the most stimulating part of education to "a stronger age than that of ordinary "school-girls, and that, by extending the

THE TEMPERAMENTS AND EDUCATION. 273

"time mainly devoted to education, haste, "excitement, and stimulation are greatly diminished.

"But even for younger students I should be sorry to be supposed to think that examinations, properly used and properly prepared for, are necessarily dangerous. This is certainly not my opinion in the case of girls of fair average health, and who inherit from their parents respectably good nervous systems.

"When such a girl has been well and "regularly taught from the age of seven or eight, she ought, I think, to be able to pass the Junior Oxford or Cambridge Local Examination before she is sixteen, and the Senior before eighteen, quite easily, with very little special preparation and without any pernicious excitement; and if she is, the examination cannot do her anything but good. On the other hand, if a girl of thirteen or fourteen, even of fair health, begins then for the first time to be well

"taught and is rapidly ground up into fitness, "first for the junior and then for the senior "examination, and is very conscious herself of "the effort required to keep her up to what "is wanted from her, the physical result will "in many cases be bad.

"Perhaps the most trustworthy rule in this case is that that which is easy is safe.

"In youth long-continued strain is un"doubtedly more injurious than it is to persons
"of mature age, and examinations are only
"safe to those who are growing and developing
"rapidly when they can be gone through with
"ease, i.e., without the mental and nervous
"strain that belong to difficulty."

Fully agreeing with these views I supplement them by urging that to avert a break-down there should be regular intervals of cessation from study, passed out-of-doors when possible, and when not, then at some indoor game that banishes all thought of studies.

I have known and heard of more cases of break-down from ill-directed or over-study among girls than boys; and that it should be so seems accounted for by the greater love and opportunities of out-door games that the latter have.

Fortunately, to excel physically is an innate desire of boys, most of whom have some coming match mixed up with their studies, and as soon as released from classes, betake themselves to the field, where their chests are expanded, their limbs exercised, a new interest awakened, the mind toned, and the nervous system maintained.

Instead; studious girls betake themselves to their books. Some boys too. Of both, the body first, and then the mind succumbs.

Having long insisted on the likings and aptitudes of children and youths being reliable guides to the studies they are most likely to pursue with success and distinction, I was pleased to read a report of what was said by Dr. Carver, the head-master of Dulwich College, on speech-day (July 1881), in reference to the practice of the College of harmonizing study and aptitude.

"His aim and that of the Governors had been to make the basis of the College as wide and comprehensive as possible. Without neglecting classical learning, they took care to provide each boy with the means of preparing himself for the various occupations of modern life. To some extent the method was an experiment, but it had been justified by success. There was too much danger in the present day of making the curriculum too comprehensive, and so frittering away the pupil's energies in getting a smattering of many subjects rather than soundness in a few.

"This danger could only be counteracted

"by careful study of the aptitudes of each boy, and by directing his academical course accordingly.

"In proof of the success of this plan the "master made reference to the long printed "list of honours and distinctions gained by "Dulwich boys at University and other public "competitive examinations."—The Times, Aug. 1st, 1881.

Were the temperaments generally known—every parent and every teacher being familiar with them—even the very early education of children would be influenced by them, and Dr. Carver and others in his position would receive scholars whose aptitudes are well known.

The common-sense plan pursued by Dr. Carver of harmonizing study and aptitude, of which the report says:—

[&]quot;To some extent this method was an experi-

[&]quot;ment, but it was justified by success,"

is, I fear, not yet pursued in many other colleges or schools.

As, however, it is probably the practical outcome of a generally felt professional necessity and has so far been successful, it may be hoped that it will ere long be widely adopted.

The plan which Dr. Carver was trying experimentally, in 1881, was forcibly insisted on in *The Spectator* in 1711—one hundred and seventy years since; and as the paper contains much that is as applicable to education now as it was then, I give it as an Appendix to this chapter.

Of education fifty years ago Canon Farrar in an address at Baltimore (Oct. 1st, 1885) said:—

"The system in vogue neglected some of "the powers of all minds, and all of the powers "of some minds. By it some, like Johnson, "grew up as little prodigies, and others, like "Sir Walter Scott, as little dunces. The same "lustre was given to the snake as to the "diamond."

This seems the most fitting place to observe that as the comfort and in some measure the success of children at school and youths at college depend on their manners and their social qualities, parents who have acquired a practical knowledge of the temperaments may, by modifying their natural action, when necessary, promote the happiness and welfare of their children through life.

A child, in whom the too ready manifestation of the leading mental characteristics of its temperament causes frequent regret, may have it tempered by the action of the modifying causes mentioned in *chap. viii.*, "diet, companionship, and pastimes."

If, for example, of a sanguine temperament, excitable and thoughtlessly impetuous, the lymphatic temperament should be cultivated by diet that increases the watery portion of the blood, or thins it:—

"The temper of a gentleman of sanguine "temperament, who for some months lived on "vegetables, became much less excitable."—

Dr. Pereira.

As a too excitable child is not likely to become less so if there are brothers and sisters who are also excitable, it should be kept apart from them, with grown-up persons having control, and be sent away to school as early as possible.

Sanguine children, impulsive and without perseverance, may have these characteristics modified by suitable books—biographies of men who attained fame by steadily pursuing some great object, rather than

THE TEMPERAMENTS AND EDUCATION. 281

books of adventure—and by pastimes that employ the hands, and require thought, time, and quiet.

Most fathers see their former selves in the tendencies, impulses, and actions of their children, and remember with pain the troubles that resulted, and the long fight that went on between their reason and their nature ere the latter was sufficiently subdued:—

"I see another law in my members, warring against the law of my mind."—Rom. vii. 23.

Hitherto the corrective means blindly used by parents, schoolmasters, and all in authority, have been persuasion, preaching, and punishment; but a rational treatment less likely to fail is supplied by an intimate and practical acquaintance with the temperaments, and how they may be modified, as I have outlined, by diet, companionship, and pastimes.

Since the foregoing was written, a cry has come from India that a very large proportion of the civil servants appointed since the institution of competition, and especially since the standard of examination has been raised, have broken down physically, died, or become insane; and, although apparently a partisan cry, it may be partly true, and, if so, is of the utmost gravity.

APPENDIX

To Chap. X.

THOUGHTS ON EDUCATION.

From "The Spectator," No. 307, Feb. 21, 1711-12.*

Quid	valeant	Versate	diu,	quid	ferre	recus		
		humeri -	-	_				
				Hor.	Ars.	Poet.	ver.	39.

— Often try what weight you can support,

And what your shoulders are too weak to bear.

Roscommon.

"I AM so well pleased with the following "letter, that I am in hopes it will not be a "disagreeable present to the public.

"SIR,

"Though I believe none of your readers "more admire your agreeable manner of working "up trifles than myself, yet as your speculations "are now swelling into volumes and will in all

* The italics, pages 286 and 289, are not in the original.

"I would have no single subject in them, wherein the general good of mankind is concerned, left unfinished.

"I have a long time expected with great "impatience that you would enlarge upon the "ordinary mistakes which are committed in the "education of our children. I the more easily "flattered myself that you would one time or "other resume this consideration, because you "tell us that your 168th paper was only com"posed of a few broken hints; but finding "myself hitherto disappointed, I have ventured "to send you my own thoughts on this subject.

"I remember Pericles, in his famous oration at the funeral of those Athenian young men who perished in the Samian expedition, has a thought very much celebrated by several ancient critics, namely, that the loss which the commonwealth suffered by the destruction of its youth, was like the loss which the year would suffer by the destruction of the spring. The prejudice which the public sustains from a wrong education of children, is an evil of the same nature, as it in a

"THE SPECTATOR" ON EDUCATION. 285

"manner starves posterity, and defrauds our country of those persons, who, with due care, might make an eminent figure in their respective posts of life.

"I have seen a book written by Juan Huartes, "a Spanish physician, entitled Examen de Inge"nois, wherein he lays it down as one of his
"first positions, that nothing but nature can
"qualify a man for learning: and that without
"a proper temperament for the particular art
"or science which he studies, his utmost pains
"and application, assisted by the ablest masters,
"will be to no purpose.

"He illustrates this by the example of Tully's "son Marcus.

"Cicero, in order to accomplish his son in "that sort of learning which he designed him "for, sent him to Athens, the most celebrated "academy at that time in the world, and where "a vast concourse, out of the most polite "nations, could not but furnish the young "gentleman with a multitude of great examples "and accidents that might insensibly have in-"structed him in his designed studies. He "placed him under the care of Cratippus, who

"was one of the greatest philosophers of the "age, and, as if all the books which were at "that time written had not been sufficient for "his use, he composed others on purpose for "him: notwithstanding all this, history informs "us that Marcus proved a mere blockhead, and "that nature (who it seems was even with the "son for her prodigality to the father) rendered "him incapable of improving by all the rules "of eloquence, the precepts of philosophy, his "own endeavours, and the most refined con-"versation in Athens. This author therefore "proposes, that there should be certain triers "or examiners appointed by the state, to "inspect the genius of every particular boy, " and to allot him the part that is most suitable "to his natural talents.

"Plato in one of his dialogues tells us that "Socrates, who was the son of a midwife, used "to say, that as his mother, though she was "very skilful in her profession, could not "deliver a woman unless she was first with "child, so neither could he himself raise know-"ledge out of a mind where nature had not "planted it.

"THE SPECTATOR" ON EDUCATION. 287

"Accordingly, the method this philosopher "took, of instructing his scholars by several "interrogatories or questions, was only helping "the birth, and bringing their own thoughts "to light.

"The Spanish doctor above-mentioned, as "his speculations grew more refined, asserts "that every kind of wit has a particular science "corresponding to it, and in which alone it can "be truly excellent. As to those geniuses, "which may seem to have an equal aptitude "for several things, he regards them as so "many unfinished pieces of nature wrought "off in haste.

"There are indeed but very few to whom "nature has been so unkind that they are not "capable of shining in some science or other. "There is a certain bias towards knowledge in "every mind, which may be strengthened and "improved by proper applications.

"The story of Clavius is very well known.

"He was entered in a college of Jesuits, and

"after having been tried at several parts of

"learning, was upon the point of being dis
"missed as an hopeless blockhead, until one

"of the fathers took it into his head to make an essay of his parts in geometry, which, it seems, hit his genius so luckily, that he after-wards became one of the greatest mathematicians of the age.* It is commonly thought that the sagacity of these fathers, in discover-ing the talent of a young student, has not a little contributed to the figure which their order has made in the world.

"How different from this manner of educa"tion is that which prevails in our own
"country! where nothing is more usual than
"to see forty or fifty boys of several ages,
"tempers, and inclinations, ranged together in
"the same class, employed upon the same
"authors, and enjoined the same tasks! What"ever their natural genius may be, they are all
"to be made poets, historians, and orators alike.
"They are all obliged to have the same capa"city, to bring in the same tale of verse, and
"to furnish out the same portion of prose.
"Every boy is bound to have as good a
"memory as the captain of the form. To be

^{* &}quot;Clavius died at Rome in 1612, aged seventy-five; "his works are comprised in five volumes in folio."

"brief, instead of adapting studies to the par"ticular genius of a youth, we expect from the
"young man, that he should adapt his genius
"to his studies. This, I must confess, is not
"so much to be imputed to the instructor, as
"to the parent, who will never be brought to
"believe that his son is not capable of per"forming as much as his neighbour's, and that
"he may not make him whatever he has a
"mind to.

"If the present age is more laudable than "those which have gone before it in any single "particular, it is in that generous care which "several well-disposed persons have taken in "the education of poor children; and as in "these charity-schools there is no place left for "the overweening fondness of a parent, the "directors of them would make them beneficial "to the public, if they considered the precept "which I have been thus long inculcating. "They might easily, by well examining the "parts of those under their inspection, make a "just distribution of them into proper classes "and divisions, and allot to them this or that "particular study, as their genius qualifies them

"for professions, trades, handicrafts, or service by sea or land.

"How is this kind of regulation wanting in "the three great professions!

"Dr. South, complaining of persons who "took upon them holy orders, though alto"gether unqualified for the sacred function,
"says somewhere, that many a man runs his
head against a pulpit, who might have done
his country excellent service at the ploughtail.

"In like manner many a lawyer, who makes but an indifferent figure at the bar, might have made a very elegant waterman, and have shined at the Temple stairs, though he can get no business in the house.

"I have known a corn-cutter, who with a "right education would have been an excellent physician.

"To descend lower, are not our streets filled with sagacious draymen, and politicians in liveries? We have several tailors of six foot high, and meet with many a broad pair of shoulders that are thrown away upon a barber, when perhaps at the same time we

"see a pigmy porter reeling under a burden, who might have managed a needle with much dexterity, or have snapped his fingers with great ease to himself, and advantage to the public.

"The Spartans, though they acted with the "spirit which I am here speaking of, carried it "much farther than what I propose. Among "them it was not lawful for the father himself "to bring up his children after his own fancy. "As soon as they were seven years old, they "were all 'listed in several companies, and "disciplined by the public. The old men "were spectators of their performances, who "often raised quarrels among them, and set "them at strife with one another, that by "those early discoveries they might see how "their several talents lay, and, without any "regard to their quality, disposed of them "accordingly for the service of the common-"wealth. By this means Sparta soon became "the mistress of Greece, and famous through "the whole world for her civil and military "discipline.

"If you think this letter deserves a place

"among your speculations, I may perhaps trouble you with some other thoughts on the same subject.

"I am, etc.,

" X."

The other thoughts on Education by this essayist (Budgell) are as valuable as the preceding, and many of his suggestions are well worth consideration by parents and teachers. They are to be found in

No. 313 . Comparative Advantages of Public and Private Education.

., 337 . Letter on Education.

" 353 . Letter on Education.

As The Spectator was eagerly read every morning by the educated classes it seems strange that the convincing views so admirably expressed in the foregoing numbers should have had no practical

THE "SPECTATOR" ON EDUCATION. 293

effect, and that boys of every rank are, it may be said, still allowed to leave school, no attempt having been made to make use of the opportunities given during their education to ascertain, from their natural gifts and aptitudes, the fields of work which they are likely to cultivate with success.

The papers appeared in 1711, and now in 1885 Mr. Chamberlain, in advocating free education in a speech at Trowbridge, used almost the same words as *The Spectator:*—

"Believe me, it is to the interest of the nation "as well as to the interests of the parents and "children that each child, according to its "natural gifts and aptitudes, should have the "opportunity of the best cultivation; that all "should be stimulated and encouraged to de-"velop the faculties with which God has gifted "them to their advantage."

Our school-boards do not benefit "the nation, the parents, and the children" as they would were they to keep in view the suggestions of The Spectator, and adopt some method as effective as the Spartan one of finding out and cultivating the natural gifts of the children, that they may be made the most of in the world.

I am very sure that ratepayers would not think superfluous a system of registration of the fitness of girls and boys for particular pursuits, as it would provide an unfailing and ready source from which they might supply themselves with those most likely to fill situations efficiently.

CHAPTER XI.

THE TEMPERAMENTS AVAILABLE IN THE CHOICE OF A PROFESSION.

Business openings difficult to find.—Fitness often overlooked.—Consequent continued regret.

—A case in point.—Sons put into their father's business fit or unfit.—Their future often arranged before they are born.—

Mr. Ruskin's by his mother.—The temperaments a guide to parents in judging the fitness of their children.—Likings sometimes found without aptitude.

Sons having finished their education, business openings have to be found for them, but are so difficult to find, that all consideration of fitness is very often put aside, although it may govern their success and happiness through life.

I have often heard it said, "Oh! Mr. —, a City man, is looking out for him,"—Mr. — never having seen the youth; knowing only his father.

It is one of the worst features of the age, that there is little or no choice; that parents are forced to place their sons, fit or unfit, in almost the first openings that present themselves; the result being, in many cases, chafing, fretting, failure.

Probably one half the number of men engaged in any profession or business have the conviction that they are naturally better fitted for some other pursuit than the one that occupies them, into which they may have been put without consideration of the scope it would give to their likings and aptitudes.

When change seems no longer possible, by far the greater number settle down to their work, and may pursue it successfully, but regret that their natural gifts are being wasted never altogether leaves them,
and, if occasion arise, may be expressed
to a sympathetic and trusted ear, even
when they have grown old and had
innumerable opportunities of comparing
themselves with others.

Only yesterday I was more than usually impressed by such an expression of regret from one whose well-proportioned, well-developed, and powerful frame at once suggested fitness for out-door physical employment; whereas, for nearly twenty years he has been engaged in routine clerical work in a city office. Of a Sanguine and Nervous temperament—energetic, intellectual, and inventive—he bitterly complained of the monotonous, uninteresting character of his work, which required no thought whatever. The nervous part of his temperament, however, has found an outlet during his leisure

hours at home, in the successful construction and invention of mechanical arrangements; and his own conviction, which is shared by all who know him, is, that such was the field to have given scope to his natural gifts. How much might be gained by individuals and the public, were such as he—Sanguine and Nervous—to change places with plodding Lymphatics, who, also out of place, are in positions requiring energy and rapidity of action!

Albert Dürer (Life and Times, 1882), "explained the difference in the outward appear"ance of men simply by a reference to the
"four complexions (temperaments), and he con"sidered it indispensable before choosing Art as
"a profession for children that their tempera"ments should be well considered."

Although parents soon become aware of their children's likings and aptitudes, they are not I think sufficiently impressed by the important truth that success and happiness in after life are dependent on these having sufficient scope, or they would surely weigh them more carefully before accepting places for their sons in which their natural gifts must at best be wasted.

Fathers who have been successful in business very generally bring up one or more of their sons to succeed them, without thought of their ability, only that a good thing be kept in the family; and there are often cherished intentions with regard to the future of sons yet unborn; it being altogether ignored that nature may have different intentions.

In "Præterita," p. 22, Mr. Ruskin says:—

"My mother had, as she afterwards told "me, solemnly devoted me to God, before I "was born; in imitation of Hannah. "Very good women are remarkably apt to "make away with their children prematurely, "in this manner.

"'Devoting me to God,' meant, as far as "my mother knew herself what she meant, "that she would try to send me to college, "and make a clergyman of me: and I was "accordingly bred for 'the Church.' Many "and many a year afterwards, my father said "with tears in his eyes—(true and tender "tears as ever father shed,) 'he would have "'been a bishop.'"

Fortunately he was allowed to follow his likings and aptitudes, for there have been many bishops in his time, but not yet another Ruskin; and it may be many a day ere England see his like again.

I do not doubt that the serious matter of entrance on the business of life would be less hap-hazard were the doctrine of the temperaments a part of general knowledge.

Were parents fully aware of the intimate

relation between the physical and the mental parts of the temperaments, as in The Scheme, chap. iv., they would begin to read the features of their children from infancy, and would become so thoroughly familiar with the associated mental characteristics, that knowledge of the direction of their capabilities would grow with their growth, and become so confirmed that it would scarcely be possible to do such violence to matured conviction as to place a youth where his natural gifts would be buried.

They could not, for example, place brothers closely resembling each other in disposition, mind, tastes, features, and figure, in positions which require for success physical and mental capabilities altogether different; or in the same profession or business two brothers as unlike each other as the twins, one of whom in his reply to Mr. Galton says:—

"He was contemplative, poetical, and literary to a remarkable degree, showing great power in that line. I was practical, mathematical, and linguistic" (page 46).

Youths, however, are often biassed by reading or otherwise, and have likings without aptitude; but parents who are familiar with the temperaments will see from the first that such likings are not in harmony with their physical characteristics, and will endeavour to substitute those that are.

CHAPTER XII.

THE TEMPERAMENTS AVAILABLE IN THE PROMOTION OF HEALTH.

The teaching of the temperaments as regards health. — Only nervousness considered. — Signs of nervousness. — Some of its causes. — Predisposition relative to the number of nervous characteristics.—Effects on business men and others.—Preventive and curative means.—Addison's modes of taking exercise.—The sleeplessness of nervousness.—Work and nervousness.—Work and sleep.—Expedients to procure sleep.—

The direction of the body in sleep.—The suburban homes of business men a cause of nervousness, especially in women.

APPENDIX. "AMERICAN NERVOUSNESS."

THE popular Teaching of the Temperaments, as regards health, is that every one of the four temperaments

is predisposed to derangement and disease of its own organ; the Heart in the Sanguine; the Liver in the Bilious; the Lymphatic or Glandular system in the Lymphatic; and the Nervous system in those of the Nervous temperament; and that every one should become acquainted with the action of the organs of the four temperaments that he may observe the causes that act injuriously on the organ that governs his own (chap. ix.).

As consideration of the causes of the diseases to which the organs of the four temperaments are susceptible would involve professional details, I shall confine this chapter to showing how the organ of the Nervous temperament—the Nervous system—may be fortified against Nervousness, the predisposing cause of many of the diseases of the three other organs.

Nervousness is very variously manifested, but apart from the special forms to which names have been given (see appendix to this chapter), sleeplessness, irritability, and exhaustion suffice to characterize it (see chap. vi., "The Nervous Temperament").

A recent writer * says :---

"Nervous diseases scarcely exist among barbarians, half-civilised people, the lower orders of cities, the peasantry, muscle-workers as distinguished from brain-workers.

"The primary cause of nervousness is civili"sation with its recent accompaniments, the
"telegraph, the railway, and the periodical press,
"which continue to draw each year most
"severely on the nerves of all classes, especially
"those favoured with education."

* "American Nervousness, its Causes and Conse-"quences," by George M. Beard, A.M., M.D., etc.-1881.

A summary of Dr. Beard's views, from The Times, is given as an appendix to this chapter.

A similar cause which might, I think, have been added, is Cheap Postage, with its vast increase of letter-writing; impossible arrears which vex the conscience; interest in a greater number of people and affairs; and impatience should the post fail to bring the expected news of them.

It is undoubted that cases of breakdown among business men, necessitating "absolute rest," and also of fatal brain mischief, are increasing every year.

Here is a death-notice that appeared in The Times, and did not seem to startle as it would were such cases very uncommon:-

"On the 21st, from an over-taxed "brain, George Chas. . . of the "firm of wool-"brokers, London, aged 49."

Two hundred years ago a death from "an over-taxed brain" was so remarkable that it was thought worthy of record in the Weston Papers, which form part of the latest report of the Historical Manuscript Commission: "There is "mourning for a wealthy man of "business,

"who has left clear £160,000 by a pursuit keene and arduous, which worked the capillaries of the brain to a filament, and dissolved the whole frame at 46."

"Pursuit keene and arduous" has now become imperative in many a business, and many a robust frame "dissolves" at, or about forty-six, with, if any at all, a much smaller residuum than "a clear £ 160,000."

The following paragraphs from The Times—only one day intervening—are

proofs of the too great mental strain from the preparation at short intervals of the original and brilliant discourses preached by eminent divines, probably already tired out by other work before their preparation could be commenced:—

"Mr. Spurgeon.—Yesterday morning the "Rev. C. H. Spurgeon announced to his "congregation that the state of his health "was such as to necessitate his leaving "London for some time. What with the "unceasing care of such a large church and "the numerous institutions connected therewith, "his brain had become weary, and some "repose, his medical adviser had told him, "was absolutely necessary."—Nov. 23rd, 1885.

"Dr. Liddon has been ordered immediately "abroad by his physicians for a lengthened "period. He is ordered to abstain from preaching and literary work, and to take perfect rest."—Nov. 25th, 1885.

It will, I think, be found that those whose physical characteristics are Sanguine, Bilious, or Lymphatic, free from Nervous characteristics, seldom suffer from nervousness, and that the predisposition is greater or less as nervous characteristics are many or few.

Muscle-workers being comparatively free from nervousness, business men, and all, especially those of the nervous temperament, who lead anxious lives and have sedentary occupations, should begin early to divide the day between muscle-work and brain-work, by cultivating after business hours some kind of outdoor exercise which may rest their brains and strengthen their frames; and indoor evening pursuits which by expending muscular force may tire nature and secure sleep.

Fortunately outdoor games are now much enjoyed, but as they are impossible

during at least six months of the year, it would surely be well were every neighbourhood provided with a coveredin and lighted gymnasium, tennis-court, bicycle course, and skating-rink, as rivals, in the winter months unsuitable weather, to cards and other sedentary games, and billiards, when played, as they often are, in underground low-ceilinged rooms.

"In the days of the early Greeks, gymnasia "were the chief places where manly sports " of all kinds were indulged in. . . .

"The Romans called their places of exercise "'Thermæ' where the bath and the gymnastic " area were under the same roof.

"Magnificent buildings, in many instances "enclosing enormous areas, provided ample "space for exercise, and no doubt did a vast "deal of good to the physique of these "nations."-The Book of Health, p. 458.

In the section -" The Influence of Exercise on Health"- in the same volume, will be found valuable information regards muscular structure, the physiology of muscular action, training, etc., and details concerning every kind of exercise -" walking, running, jumping, dancing, "riding, skating, rowing, cricket, foot-"ball, swimming, lawn tennis, racquets, "bicycling and tricycling, other games, "gymnastics, calisthenics."

The kind of indoor muscular exercise at home that may promote health and ward off nervousness must be such as can be practised with regularity.

In The Spectator, No. 115, July 12th, 1711, Addison fully acknowledges the daily necessity of bodily exercise, and gives his own modes of taking it :-

"There is no kind of exercise which I "would so recommend to my readers of both "sexes as this of riding, as there is none which so much conduces to health, and is every way accommodated to the body according to the idea which I have given of it. Dr. "Sydenham is very lavish in its praises; and if the English reader will see the mechanical effects of it described at length, he may find them in a book, published not many years since, under the title Medicina Gymnastica.*

"For my own part when I am in town, for want of these opportunities, I exercise myself an hour every morning upon a dumb-bell that is placed in a corner of my room, and it pleases me the more because it does every thing I require of it in the most profound silence. My landlady and her daughters are so well acquainted with my hours of exercise, that they never come into my room to disturb me whilst I am ringing.

"When I was some years younger than I "am at present I used to employ myself in "a more laborious diversion, which I learned "from a Latin treatise of exercises that is

^{*} By Francis Fuller, M.A.

"written with a great deal of erudition:* it is there called $\sigma \kappa \iota o \mu a \chi \iota a$, or the fighting "with a man's own shadow, and consists in "the brandishing of two short sticks grasped in each hand, and loaded with plugs of lead at either end. This opens the chest, exercises the limbs, and gives a man all the pleasure of boxing without the blows. I could wish that several learned men would lay out that time which they employ in controversies and disputes about nothing, in this method of fighting with their own shadows. It might conduce very much to evaporate the spleen, which makes them uneasy to the public as "well as to themselves."

"To conclude,—As I am a compound of soul and body, I consider myself as obliged to a double scheme of duties; and think I have not fulfilled the business of the day when I do not thus employ the one in labour and exercise, as well as the other in study and contemplation."

^{*} Hieronymus Mercurialis's celebrated book, Artis Gymnasticæ apud Antiquos, etc. Libri sex. Venet. 1569, 4to.

As sleeplessness is often the first symptom of nervousness, and is soon followed by exhaustion, which paves the way for the rapid advance of every other symptom, it should not only cause alarm, but means should be promptly used to prevent its continuance, or the inevitable break-down may speedily ensue.

Mr. Savory, F.R.S., on "Sleep and Work," in *The Book of Health*, p. 92, says:—

"Here, of course, the important question of temperament comes in. An event which will destroy the sleep and appetite of one man for a week will have no sensible effect for a moment on another.

"Different temperaments are not so dif"ferently affected by hard work in the proper
"acceptation of the term, as by care, anxiety,
"worry, and the like. In fact, for such people
"hard work is often, in the long run, the best
"remedy."

have somewhere seen it observed that the self-educated artizan, who studies by night, is saved from nervousness by being obliged to work at his handicraft by day; and the following extract shows that professional men whose work is more material, escape a calamity that overtakes some of those who draw continuously on the imagination:-

"A fact is mentioned by Dr. Conolly, which, "if it be confirmed by farther observation, "would lead to some important reflections.

"He states that it appears from the register " of the Bicètre that maniacs of the more "educated classes consist almost entirely of "Priests, Artists, Painters, Sculptors, Poets, and " Musicians; while no instance, it is said, occurs "of the disease in Naturalists, Physicians, Geo-"metricians, or Chemists."-Abercrombie on the Intellectual Powers.

The fact stated in the extract suggests that Poets, Painters, and Musicians, whose

intellect, like Shelley's, "waits on their "temperament and works up warm emo"tions into exquisite abstractions" (p. 371), and many others whose intellectual work is less in view, should remember, like Addison, that they are a compound of soul and body, and think it essential, as he did, to "employ the one in labour "and exercise, as well as the other in "study and contemplation."

Poets and Painters are said by Dr. J. Crichton Browne to die early compared with Mathematicians and Rational Philosophers.—The Book of Health, p. 363.

All whose pursuits involve brain-work, and after-thought which may run into the night and spoil sleep, and who have sufficient exercise in the day, should, in the long winter evenings, practise some art, or acquire a practical knowledge of some science, which would fully

occupy the mind and could be pursued at home. Such are wood-engraving, the turning-lathe, cabinet-work, chemistry, electricity, etc.—the last a study which is full of interest from its useful application in so many ways, and the hope which may be entertained by any one who devotes his evening leisure to its pursuit, of discovering other uses.

Lord Salisbury pours oil on troubled waters by chemical research, and is about, it is said, (*The Athenæum*, *Dec.* 19th, 1885), to publish some of the results.

Every one may find some way of employing the evenings so as to banish "care, anxiety, worry, and the like."

Banished these three enemies of sleep must be, or sleeplessness is certain to obtain the mastery.

Reading is a common resource.

I have known a few problems of Euclid succeed.

I was told by a patient that, after many sleepless nights, he for the first time took the works of a clock to pieces, cleaned, and put them in place again before going to bed, and that the absorbing interest of the work, and the satisfaction he felt that he had completed it successfully, made him sleep soundly the whole night through.

Another sufferer got a lathe, bench, and tools, and persevered evening after evening for months, till at last he succeeded in constructing the model of a steam-engine, which was beautifully finished in every part, and worked smoothly.

"Whenever I cannot sleep I leave "town," said a well-known and hard-worked member of Parliament to us.—

The Book of Health, p. 542.

Probably when Mr. Gladstone takes to tree-felling it is to ward off the sleeplessness for which his physician had to send him to the sunny South a few years ago.

Probably, also, we are indebted to sleeplessness for his welcome contributions to The Nineteenth Century, undertaken, it may be, to fill his mind with other thoughts than those that would banish sleep.

Mr. Gladstone's face is a tapering one, from a broad forehead,* and his temperament, judging from portraits, is probably Nervous and Sanguine, the former predisposing him to Nervousness, and the latter enabling him to overcome it.

Lord Beaconsfield's face was also tapering, from a high forehead,* and as his hair and eyes were black, his tempera-

^{*} See photograph in Men of Mark; A Gallery of Contemporary Portraits. London: Sampson Low, Marston, Searle, & Rivington, 1876-82.

ment was probably *Bilious and Nervous*, in which, bilious characteristics being more numerous than nervous, nervousness is kept at bay.

Dr. Pollock, on "How to Induce "Sleep," in The Book of Health, p. 543, says:—

"Many plans have been recommended to "procure the blessing of repose for those who "cannot 'lay them down in peace and sleep.'"

"Exercise late is good. 'After supper run "'a mile,' and it is certainly not advisable to "go direct from a hot sitting-room to a warm bed-room for the night. A turn out into "the cool air is much more healthy, and often succeeds in procuring a quiet night. The bed should be firm and elastic—not feathers. "In India, Europeans use a pillow for their knees to keep the bed cooler.

"To procure sleep we have been advised to get up and walk about, to use the fleshbrush, and this will be found highly useful where 2 dry state of skin gives that restless

"feeling called 'the fidgets.' We have found
"total instantaneous immersion in a cold bath
"highly useful. The Chinese advise to wash
"the mouth with cold water; in India they
"tickle the soles of the feet. Boerhaave re"commends to listen to dropping water, also
"Spenser:—

- "And more to lulle him in his slumber soft,
- "A trickling streame from high rock tumbling downe
- "And ever drizling raine upon the loft,
- "Mixed with a murmuring winde, much like the sowne
- "Of swarming bees, did cast him in a swoyne."

"Others advise the Æolian harp, while Æs"clepiades used to be rocked asleep. Franklin
"advised a cold-air bath, taken by walking
"about the room in one's night-dress, and this
"is very successful. Others put the feet in
"very warm water. Electricity has been re"commended for this as for everything else."

In another section of the same valuable

volume (p. 303) J. Crichton Browne, M.D., LL.D., F.R.S., says:—

"Innumerable artifices and expedients for the "induction of sleep by means of mental opera-"tions have been devised and recommended "by the victims of insomnia in all ages and "countries; but these, when critically examined, "resolve themselves into distractions from the "high roads of thought, and the monotonous "and wearying pursuit of some almost mechani-"cal mental process. The harassed merchant "is urged to repeat poetry, the over-strung "artist to dive into logarithms, and all are "advised to count hundreds, to rehearse the "multiplication-table, to follow the ticking of "the clock, to think of the humming of bees, or "imagine that the bed whirls round with them.

"Only in mild cases can such expedients "avail, and only in them for a limited period."

Dr. Pollock says:—

"We are often consulted as to the best "posture in sleep. It is, perhaps, a matter of "indifference which side we select to lie on, "but all are agreed that sleeping on the back "is bad. 'Sleep not on your back, or in the "'posture of a dead man,' says Confucius and "Hippocrates also."

As the authors quoted in this chapter have left unnoticed the influence of the direction of the body on sleep, I am induced to republish the following letter which gives the experience of a legal friend who is the most unlikely man I know to be misled:—

SLEEPING NORTH AND SOUTH.

TO THE EDITOR.

SIR,—I have read with much interest your short article upon this question, and upon its bearing on longevity. It is a curious fact, but it is certainly true, that the position in which persons lie has a very important effect upon their sleeping. I discovered years ago that I could not sleep if I lay north and south; and, after many observations, I came to the conclusion that there was some influence of this kind which was little, if at all, understood. I found that I could sleep best lying east and west, particularly with the head to the west, and this practice I have adopted for many years. I always carry a small pocket compass, so that in sleeping at strange hotels I am enabled either to select a room in which the bed is so placed or to have the bed shifted. I feel convinced that in many instances where persons are suffering from insomnia they would find instant relief if the position in which they lay were changed. I trust that public attention will now be called to what I believe to be an exceedingly important subject.—I am, Sir, yours faithfully,

A. G. D.

Mansion House-chambers, London, E.C., Sept. 6, 1883.

The short article referred to in the letter is on the death of a foreign centenarian, who attributed his longevity and uninterrupted good health to sleeping north and south, the direction in which the writer of the letter cannot sleep.

As the direction of the head and feet has so great an influence on the sleep of some who are in health, as my friend is, and always has been, it may be found to influence the sleep of many who have become nervous and sleepless, and all such, even those who know that they could previously sleep well in any direction, should try the effect of every possible change.

In the last edition of "Hood on Gout," etc., 1885, there is a chapter on sleep, in which the direction of the head and feet is noticed:—

"Some persons have maintained, what, perhaps,

"is rather visionary, that a bedstead should "always be placed east and west, on the ground "that it is injurious to sleep in the line of the "currents of magnetism, which traverse the "earth from north to south. There is probably "no evidence in support of the belief that to "be either in the line of those currents or "transverse to them would exercise any appre-"ciable effect" (page 396).

My friend's peculiarity, as given in his letter, was not the result of any visionary speculation, but was "discovered;" and the discovery having been confirmed by long experience, it must be regarded as a fact which ought to be generally known, that such peculiarity exists.

As, probably, many of those who tell us that they "never sleep well in strange beds," have the same peculiarity without knowing it, they should find out at home by changing the direction of the bedstead to the different points of the compass.

A somewhat similar peculiarity remains unaccounted for: the inability of some to ride in a carriage except facing the horses; and there are many others less generally known.

I conclude this chapter by calling attention to a widespread cause of the increase of nervousness, especially in women, which has, I think, escaped observation,—the choice of suburban homes by young men about to marry, who leave them early in the morning for situations in offices or places of business in cities or towns, and return to them late in the evening, often so worn and exhausted that it is not in them to make the evenings cheerful to their wives, who, most days it may be, have spoken to no one except tradesmen or servants the whole of the day.

A dull evening is inevitable, for the neighbourhood provides no entertainment that would interest or amuse, and friends with whom they might spend a pleasant hour probably live in some other suburb, too far away.

A young wife from a home where relatives and friends within reach made her life interested and happy, is almost certain, sooner or later according to her temperament, to become nervous from the solitary and aimless life she is obliged to lead—alone all the day in a quiet suburban villa.

I am hopeful that in London the tide is about to turn from suburban homes to the handsome, commodious, healthful, and comparatively inexpensive ones—the residential flats rising up so rapidly near the British Museum and farther west; the only homes which render happiness and

health possible to the greater number of the newly-married and others who have no young children.

They bring within reach the variety which is essential to keep the mind and nervous system in health. The husband may be within walking distance of his place of business; the wife be able in the day to visit suburban friends wherever they are; and husband and wife, instead of being immured of an evening, can go as often as they wish where they may see or hear something new, at very little expense.

APPENDIX To Chap. XII.

"AMERICAN NERVOUSNESS."

From The Times.

"AMERICAN NERVOUSNESS.—In a recently"published paper on this subject by Dr. G.
"M. Beard, of New York, the author adduces
"some striking facts to prove the recent rapid
"spread of nervous disease in the United States
"—facts, we suspect, which apply with equal
"force to the population of our own country.
"Our fathers in medicine of the last century,
"if they could be brought from their graves,
"would have to be told what we mean by
"the term nervousness. They would say, and
"very truly, that the Greeks had no word for
"nervousness as we now understand that term;
"and that even down to the eighteenth century
"nervousness was supposed to mean irritability

" of temper, disposition to anger, excitability—a "mental quality, and not a physical disease. "In reply, we should be obliged to say that "in the nineteenth century nervousness means "nervelessness, nervous exhaustion, abnormal "susceptibility of the nervous system to ex-"ternal or internal irritants. American nervous-" ness during the past half-century has expressed "itself by a large variety of symptoms, a number " of which are so frequent, so positive in their "character, and so important, that they have "given names to disease, and are known as "such. Among these symptoms and expres-"sions of modern nervousness are neuralgia, "sick headache, nervous dyspepsia, hay fever, "and, above all, neurasthenia, or nervous ex-"haustion in all its various forms. These "conditions, with others that could be men-"tioned, constitute a family of nervous diseases "that have developed chiefly during the last "half-century, and are most abundant, most "severe, and most varied in their manifestations "in the northern portion of the United States, "although they are found in, and are now "extending to, England and the Continent

"of Europe. The scientific proofs of this "unprecedented nervousness of the Americans "during this generation are very numerous. "First of all, Dr. Beard tells us, there "is the increased sensitiveness to cold and "heat, which is observed among all the "brain-working classes. The fathers of this "generation were content with a temperature "of 60° Fahr.; now a temperature of at "least 70°, and even higher in many cases, "is necessary for comfort. In other words, "the present generation of Americans are "10° more sensitive to cold than were "their fathers. The heat of the summers is "no greater than it was a century ago, but "the cases of sunstroke and heat-prostration "are widely out of proportion to the increase " of the population. Dr. Beard also refers to "the sensitiveness to stimulants and narcotics, "as alcohol and tobacco, and even tea and "coffee. 'Not only our fathers, but our "' mothers,' he says, 'could drink freely of "" wines and strong liquors, and even smoke "'as much as they wished, without developing "'any of the nervousness of our time. At the

"'present time, a very considerable proportion "' of the population of this country are unable "'to smoke or chew or drink even mild wine, "' or tea or coffee - especially the latter - without "" making themselves perceptibly worse thereby." "All this Dr. Beard believes to be modern "and pre-eminently American. Likewise the "idiosyncrasies of patients in regard to the "actions of medicines and the effects of drugs "and various external irritants, have, during "the last half-century, multiplied in variety "and phase, and greatly augmented in number. "There are thousands who cannot bear opium, "who are kept awake instead of being put "to sleep by it. One of the very best signs " of our civilization, Dr. Beard thinks, is found "in the premature decay of the teeth. None " of the usual explanations—the use of sweets, "the use of acids, neglect of cleanliness, and "the use of food that requires little mastica-"tion-will account for the fact; witness the "fine teeth of most savages. The cause of "the decay of teeth is subjective far more than "objective, in the constitution of the modern "civilized man. Delicacy of digestion is one

"of the best known and first observed effects "of civilization upon the nervous system. The "history of the rise and fall of pork as a "food is itself most instructive on this point. " Pork, like the Indian, flies before civilization; "the stomach of the brain-worker cannot digest "it. Yet former generations ate it almost daily "without ever asking themselves whether it "was easy or hard of digestion. This de-"thronement of pork, Dr. Beard states, is "having a disastrous effect upon the American "people; for, as yet, no article of food with "a sufficient amount of fat has been generally "substituted. Fat in our dietaries is one of "the most imperative hygienic needs of our "time, and which, on all hands, we are trying "to meet by the use of cream, cod-liver oil, "eggs, fish, and the fat of fresh meat. The "eyes are good barometers of our nervous "civilisation; the increase of asthenopia and "shortsightedness, and, in general, of the func-"tional disorders of the eye, are demonstrated "facts, and are most instructive. Dr. Beard "then shows the influence which the increase " of nervousness has had in the reproductive

"system in a variety of ways. The acknow-"ledged increase in the diseases of women, Dr. "Beard attributes to one great cause, to which "all others are subordinate—civilization. He "thinks there is no question but that diseases "have changed their type during the last half-"century. The only question is, what are the "degrees of change, and what are the causes "which produce these results? Curiously "enough, statistics show that longevity has "increased almost pari passu with this increase "of nervousness. These two apparently oppo-"site facts, according to Dr. Beard, are harmo-"nized by a third factor-namely, nervousness "is not only consistent with longevity, but "actually favours it, by preserving the system "from attacks of acute inflammatory disease. "Nervous diseases scarcely exist among bar-"barians, semi-civilized people, the lower orders "in cities, the peasantry, muscle-workers as "distinguished from brain-workers. The pri-"mary cause of all this nervousness is civiliza-"tion, with its recent accompaniments, the "telegraph, the railway, and the periodical "press, which continue to draw each year

"most severely on the nerves of all classes, "especially those favoured with education. "They have intensified in ten thousand ways "cerebral activity and worry. This factor applies to Europe as well as America. The reason why Americans are more nervous than any other people of this planet, Dr. Beard finds first in the dryness of their atmosphere, and second, the extremes of heat and cold. Dr. Beard enters into interesting details on these points, and also on the various methods of treatment which ought to be adopted to counteract or cure the various forms of nervous disease."

A leading article of *The Times* on the foregoing summary shows that some of the results attributed by Dr. Beard to nervousness are partly due to other causes, and the following is the conclusion arrived at on his views as a whole:

[&]quot;It may nevertheless be said that Dr. Beard's

"opinions, like most of those which are ad"vanced from somewhat one-sided points of
"view, by men of intelligence and capacity,
"rest upon a not inconsiderable substratum of
"truth."

CHAPTER XIII.

THE USE OF THE WORD TEMPERAMENT.

In frequent use.—Should always indicate the physical characteristics of one of the four Temperaments, or a compound one.—Extracts showing that it seldom does.—Single mental or other traits wrongly called Temperaments.—List of twenty-eight so-called Temperaments.—Extracts containing some of them.—Temperament seldom used formerly.—Only once in Addison's Spectator— Not once in Johnson's Rambler, or Idler, or Goldsmith's Vicar of Wakefield .- Probable reason.—Additional extracts showing the misuse of the word.—Standard descriptions of the four Temperaments essential to the right use of the word in literature and conversation.

IT is shown in chapter ii. that—
"The Temperaments are groupings of the" chief physical characteristics which distinguish

"men from one another,—dark or fair; stout "or slim; square, oval, or tapering face; short "or long neck," etc.,

and the present chapter is intended to show that the word temperament is almost invariably used without reference to outward appearance, and therefore conveys no obvious meaning.

Few words of four syllables are in more frequent use. It comes readily to the tongue in conversation, and is very often met with in the ordinary course of reading. It is important therefore that it be generally known to be wrongly used unless it name or clearly indicate one of the four temperaments or a compound one.

It so seldom does either, that Dr. Maudsley has probably not gone too far in saying, as already quoted (page xi.), that—

"Temperament and Idiosyncrasy are big "words, at present little better than cloaks of

- "ignorance; they are symbols representing un-
- "known quantities rather than words denoting

" definite conditions."

That the familiar phrases "my temperament," and "his temperament," are almost always used without thought of any of the temperaments, may be readily tested by asking any one who uses either of them to name the temperament.

This very day a well-informed friend with whom I was conversing accounted for the different ways of two brothers by saying, "Their temperaments however are "quite different," but was unable to name the temperament of either brother, having used the word in relation to mental traits only.

Were the meaning of the word questioned in the same way when met with in the ordinary course of reading, it would be found that as in conversation, so in literature, it scarcely ever refers to a particular temperament which can be named.

In proof, I give a few of many extracts, which I have taken from the daily press and recent publications.

I. THE DUKE OF ALBANY.

"To a young man of the temperament and tastes of the Duke of Albany, endowed with all the opportunities which his position secures him, there is clearly open a career of exceptional usefulness and beneficence. Army and Navy were alike closed to him, but there still remained open the less active, but not less useful, nor, to a youth of his temperament and tastes, less attractive career of study and intellectual pursuits."

Here, although his temperament is twice referred to as fitting the Duke for a particular career, we are left in the dark as to whether it was Sanguine, Bilious, Lymphatic, or Nervous.

2. DEAN STANLEY.

In a short biography of the late Dean Stanley, which appeared in a daily paper the morning after his death, his temperament is introduced three times.

"To no one could the decay of mental and "physical vigour which comes too often with "advancing years have been a more painful "trial than to a man of his temperament.*

"But the brilliant Dean of Westminster had "other, and for a man of his temperament and "genius, higher work to do than that of de-"votion to the ordinary tasks of the Christian "ministry.

"In spite of his personal gentleness and his abundant generosity of disposition, the Dean never put forth his full powers of controversy save in the face of almost crushing opposition. A temperament of this kind . . ."

There could be no better examples of the unmeaning use of the word, as the

^{*} This and the greater number of the following extracts may be read without the words in italics.

reader does not learn from it what the late Dean's temperament was, and loses the temperament photograph of him—dark or fair; square, tapering, or oval face; stout or slim build, etc.,—which such knowledge gives.

The paragraphs seem to lose nothing by the omission of the references to temperament.

"To no one could the decay of mental and "physical vigour which comes too often with advancing years, have been a more painful trial, than to a man of his temperament."

In the two other paragraphs the words in italics seem equally unnecessary.

3. CARLYLE.

"In short, as was said of him by his own mother, 'Thomas was gey ill to live wi.' And the shrewd old woman, fond parent as "she was, precisely hit off her favourite son's temperament."

Which of the temperaments?

4. PRESIDENT GARFIELD.

"He has met at the outset of his adminis"tration a series of troubles calculated to vex
"the spirit of any man, especially one of his
"temperament, who takes to his couch at night
"the cares of the day."

In this extract temperament conveys no definite meaning, and the words in italics may be omitted and not missed.

5. Mr. FAWCETT.

In the following extract from a review of Stephen's Life of Fawcett, the reference to temperament may for the same reason be similarly passed over without loss.

"Here, as in all other phases of his life, "Mr. Stephen rightly insists on the thorough "kindliness and generosity which in Fawcett's "temperament were combined with remarkable "shrewdness and unswerving independence."

In several of the newspaper obituary

memoirs of Fawcett his temperament is referred to, but in none does the word name or indicate his real temperament—his physical characteristics.

6. LORD HARTINGTON.

"Lord Hartington's Bury audience received this curious hint (his retirement from political life) with laughter. But it is not perhaps altogether a joke. Statesmen of Lord Hartington's temperament and position do not jest over such subjects in public."

As Lord Hartington's temperament is not generally known, the writer would have done well to name it.

In the Home Rule debate (May 11th, 1886) Mr. O'Brien attributes "anxieties and apprehensions" to Lord Hartington's temperament, which is referred to as if it were well known, although probably the speaker himself could not have named it if asked:—

"Mr. W. O'Brien said . . . To a politician of the noble marquis's temperament it seemed natural that apprehensions such as he appears to entertain should occur; but they could not forget that very much the same sort of anxieties and apprehensions had weighed on the noble marquis's mind in reference to other Irish reforms."

7. Mr. IRVING ON PLAYERS.

Mr. Henry Irving, at the dinner of the Royal General Theatrical Fund 1884, said:—

"I doubt whether the poor player is much "indebted to those who linger in tedious detail on the dangers of his temperament and the slenderness of his purse."

Had it been usual in literature and conversation to name and so make known the temperament, Mr. Irving would probably have used some other word; for among players there is apparently as great a variety of temperament as among Englishmen in general (page 353).

There seems no limit to the naming of temperaments from mental and other traits which have no dependence on, or association with, outward appearance; in ignorance, apparently, of the very limited influence of the temperaments on mental action and character (page 28).

The following so-called temperaments, and others besides which gave no clue to physical characteristics, caught my eye in the ordinary course of reading:—

An Artistic Temperament.
The Musical Temperament.
The Poetic Temperament.
The Scientific Temperament.
The Emotional Temperament.
A Dreamy Temperament.
The Sensational Temperament.
A Positive Temperament.
An Ascetic Temperament.
A Convivial Temperament.

USE OF THE WORD TEMPERAMENT. 347

An Anxious Temperament.

A Suspicious Temperament.

A Combative Temperament.

A Religious Temperament.

A Peculiar Temperament.

A Versatile Temperament.

A Buoyant and Mercurial Temperament.

A Dry and Languid Temperament.

A Feeble Temperament.

An Unsound Temperament.

An Insane Temperament.

The Female Temperament.

The Masculine Temperament

The Roman Temperament.

The French Temperament.

The American Temperament.

The English Temperament.

Several of the pseudo-temperaments of the list will be found in the following extracts:—

8. CHARLES JAMES FOX.

"Charles James Fox, a good example of the "emotional temperament. Both the virtues and "defects of his character, as a statesman and "as a man, are explicable from the same pro-"minent temperament."

Although by its repetition temperament is brought conspicuously to notice in this extract, neither emotional, nor any single trait, can constitute a temperament. Emotional is one of the mental characteristics of the Sanguine temperament of the Scheme, and has no more right than any of the others to be called a temperament.

Had the writer been familiar with the temperaments, he would probably, instead of temperament, have used some word which has an unlimited range of application.

NATURE was at his service. "An emotional nature" is in common use, and would have expressed his meaning without challenge.

9. LORD SALISBURY.

"Lord Salisbury's temperament is supposed to be combative, but it does not follow that in the maturity of his powers and with the responsibility of leadership he will not be able to pursue steadily a policy of moderation."

As it would be useful to know which of the temperaments is combative, it is to be regretted that the writer did not name Lord Salisbury's temperament. But probably he had no thought of any of the temperaments; and if so, *Nature*, or *Disposition*, which, like *Nature*, is free from the tie of physical characteristics, would have expressed his meaning and led to no questioning.

10. SIR GEORGE BRAMWELL.

Sir George Bramwell, on his retirement from the Bench, said:—

"I am afraid I have not always succeeded in keeping that even temper which is so desirable in a Judge. I know I have an anxious temperament."

II. DEAN STANLEY.

"He had striven with all the energy of an "eager temperament for the cause of religion and Christianity as he understood it."

12. PRINCE BISMARCK.

"The Chancellor is, it seems, a man of a "profoundly religious temperament."

13. CARLYLE AND MACAULAY.

"But when two men of positive temperament hold views diametrically opposite, and neither can entertain even the suspicion that the other may accidentally be right"

These four extracts show the prevailing custom of calling any mental, moral, or other trait, a temperament, although it may neither be dependent on, or associated with outward appearance. Probably a man is not more anxious, eager, or positive, because dark or fair: certainly not more or less religious on that account.

The author who in the preceding extract says that Carlyle and Macaulay were of the same temperament—positive—shows that the term did not include outward appearance; for in the same work he describes Carlyle as "5 feet 11 inches and thin, at fifty-four," and Macaulay as "a squat, thick-set, low-browed, short, grizzled little man, at fifty."

The use of the word temperament in the extract was quite unnecessary, for two positive men would have given readers as much information as "two

men of positive temperament," and led to no question of outward appearance.

14. A VERSATILE TEMPERAMENT.

"Sir Stafford Northcote had to undergo a "trial of versatility of temperament in his "installation on Wednesday as Lord Rector of "the University of Edinburgh."

Sir Stafford had elsewhere on the same or the previous day, given a political address, and having given one of a very different kind so soon after, is called versatility of temperament. Versatility it may have been, but not versatility of temperament, which means, if anything, dark at one time, fair at another.

The extract may be read without the words in italics and suffer no loss,

15. A PECULIAR TEMPERAMENT.

"If we are a nation of shopkeepers we have at all events inherited the peculiar temperament of the mediæval shopkeeper, who was as fond of a tough fight in a good cause as the most turbulent baron."

Readiness to fight in a good cause can scarcely be attributed to the temperament of Englishmen, among whom, except in some out-of-the-way places, variety of temperament from intermixture of races is so great that probably no one temperament prevails more than another.

There can be no doubt that the word temperament is much more frequently used now than formerly. It appears twice in extract 1. Three times in the obituary biography of Dean Stanley—see extracts, page 341. Twice in extract 8, and as often in other extracts

which I have withheld; but in the 635 papers in Addison's *Spectator*, although personal description abounds in the greater number, it appears only once, and then it is taken from a Spanish author (see page 285 of this vol.).

Neither in Dr. Johnson's Rambler, nor his Idler; the former containing 208, and the latter 103 papers, most of them, like those in the Spectator, on men, manners, and morals, does it occur even once. It is not in "The Vicar of Wakefield."*

The reason why it is avoided by these old masters is at hand.

Johnson, in praising Addison's style in Lives of the Poets, says:—"He seeks no

^{*} I have confidence in this statement being correct, as the volumes have been purposely gone through by careful readers.

USE OF THE WORD TEMPERAMENT. 355

" ambitious ornaments and tries no hazardous innovations."

To express the habit of mind that prompts to individual action, Addison, Johnson, and Goldsmith, instead of temperament, used temper, disposition, nature, or some other word which is not tied, as temperament is, to physical characteristics.

I give a few additional extracts which farther show the unlimited use of the word at the present day:—

16. MISS TERRY AND MR. IRVING.

"Temperament and charm are gifts bestowed "on Miss Terry, but withholden from Mr. "Irving. His acting lacks both, and is un"sympathetic."—New York Times, Oct. 21, 1883.

Temperament is strangely used here.

Seemingly, instead of expression, and the source of the extract shows that the unlimited and random use of the word is probably as general in America as at home.

17. MISS ANDERSON.

In a notice of Miss Anderson at the Lyceum as Parthenia in Ingomar, it is said:

"The beautiful Parthenia like a soulless "statue pleased the eye, but left the heart "untouched. It became evident that faults "of temperament were to be set off against "the actress's unquestionable merit."

Like "lack of temperament" in the preceding extract, "faults of temperament" in this, seems "an ambitious ornament," used instead of the familiar phrase want of feeling.

18. TEMPERAMENT AND POLITICAL ACTION.

"The Conservative party, unlike their oppo"nents, are not divided in opinion as to the
"danger of erecting a rival Legislature in Dublin,
"and unlike them, we must also add, they are
"actuated by no very strong inducement, either
"of temperament or political aims, to strive for
"the recovery of office."

Here also the word seems "an ambitious ornament," but without trace of meaning.

19. THE TEMPERAMENT OF CON-

"Some constituencies have, like Wigan, "according to Mr. Cross, a vivacity of tem"perament which, in conjunction with an excess "of zeal in agents, conduces to sudden alter"ations in the representation."

20. THE TEMPERAMENT OF WESLEYANS.

"The selection just made by the Wesleyans "for the office of President, illustrates the "practical wisdom and even temperament which

"have enabled that body to prosper in spite of inherent weaknesses."

In these two extracts temperament is used quite in a random way, unless it is meant that the majority of Wesleyans and of the constituency of Wigan, are Sanguine, Bilious, Lymphatic, or Nervous—fair or dark; stout or slim.

As with the greater number of the extracts, so with these two, there seems no loss of meaning by passing over the reference to temperament.

There is every reason why temperament should continue to be used as frequently as now; but with the difference, that it make known the physical characteristics of one of the four temperaments, or a compound one.

That it do so, standard descriptions of the four temperaments are essential; for till such have been supplied and accepted, temperament must continue to imply an indefinite force which impels to individual action, instead of naming or indicating a definite one—physical characteristics.

Precise knowledge of the physical characteristics of the four temperaments would soon be followed by precise observation of their naturally associated mental qualities and traits of character, and by a particular temperament—pure or compound—being invariably named or indicated. "My temperament," and "his temperament," would become my or his sanguine, bilious, lymphatic, or nervous temperament. Including, as it then would, both physical and mental characteristics, temperament would be one of the most comprehensive words in the language.

The gain to literature and conversation by thus naming the temperament would be great; for, "to be told that "any one is of a sanguine temperament "should bring before the mind's eye a "man with red or reddish hair, blue "eyes, a more or less florid complexion, and "the other physical characteristics of the "temperament. And so of the other pure "temperaments" (page 151).

The names of compound temperaments, however, require to be supplemented by those of the replacing characteristics (see page 152).

CHAPTER XIV.

WORD, BIOGRAPHIC, OR TEMPERAMENT PORTRAITURE.

Word portraiture seldom effective. — Method necessary.—The form and colour characteristics of the temperaments recommended.—Sir Walter Scott on the value of portraits in biography. — Engravings only partly effective. — Descriptions of Dickens from Mr. Forster's Life.—Of Sir Thomas More and Shelley.—Of Southey, Dickens, Tennyson, and others, by Carlyle. —Biographic portrait of Mr. Fawcett.—Temperament portraiture valuable in conversation, cases of identity, and heredity.—Likeness of Anne Clifford, Countess of Dorset, Pembroke, and Montgomery, to both her parents.

Conclusion.—Fields in which observation of the temperaments may yield useful results.

WORD portraiture, or, as Carlyle calls it, "biographic portraiture," now greatly neglected by authors, would

probably become as general and as effective as canvas portraiture were some system or method uniformly applied to it; and none I think could be more serviceable than the physical characteristics of the four temperaments as arranged in the Scheme, chapter iv.:—

Colour Characteristics.

- 1. Colour of the hair.
- 2. Colour of the eyes.
- 3. Colour of the complexion.

Form Characteristics.

- 1. Form of the face.
- 2. Outspread or narrow nose.
- 3. Short or long neck.
- 4. Build of the body.

Very rarely does a biography contain a personal description of its subject that brings him before us as in life. Yet such a description should be easy enough

to a biographer who had personal acquaintance with him whose life he writes, and would probably be always given were some acceptable method introduced. Nothing could add so much to the gratification of readers as such a description.

"If the desire to look upon the face of living "men denotes a pardonable and even healthy "curiosity, it is not less commendable to wish "to know what was the outward form and "gestures of those who have made their mark "in history." - Notice of the National Portrait Gallery in The Times.

Addison began the first number of The Spectator by asserting that, to know the appearance of the writer of a book, increases our interest in it:-

"I have observed that a reader seldom "peruses a book with pleasure till he knows "whether the writer of it be a black or a

"fair man, of a mild or a choleric disposi"tion, married or a bachelor, with other
"particulars of a like nature, that may conduce
"very much to the understanding of an
"author."

If anyone hesitates to accept Addison's argument as applicable to the writer of every kind of book, no one can doubt its application to the subject of a biography, if he remembers the heightened interest with which he read the life of some one he knew and recollected: how his personal appearance, his voice, his manner of speech, his expression and gesture, were present to him from the first page to the last.

The value of portraiture in biography is well expressed in a letter from Sir Walter Scott to the publishers of Lodge's Portraits:—

"It is impossible for me to conceive a

"work which ought to be more interesting "to the present age than that which exhibits "before our eyes our fathers as they lived, "accompanied with such memorials of their "lives and characters as enable us to compare "their persons and countenances with their "sentiments and actions."

Such comparison is obviously imperfect unless colour be given to make countenances wholly life-like-the colour of the hair, eyes, and complexion,-and as personal description is conspicuously absent from Lodge's memoirs, Sir Walter's idea was only partly realized by the colourless engravings.

Wanting colour, the usual vignette engraving facing the title-page of a biography is a useful addition to a good description, but an imperfect substitute, giving only the form of the face and of its features.

As the physical characteristics of the temperaments include the form of the face, the colour of the hair, eyes, and complexion, and the build of the body, temperament portraiture, as this might be called, would enable readers to see with the mind's eye the subject of a biography as he was seen by his contemporaries, and familiarize them with the connection between the physical and mental characteristics of the temperaments.

The newspaper biography of Dean Stanley, already noticed as referring to his temperament no less than three times, was no doubt written by one who had often seen the Dean, yet of his personal appearance there is not the slightest mention. Readers remain ignorant of what he was to look at, and, in consequence, all about his mind, heart, and work, although admirably given, is not only less interesting, but less vividly remembered. Had temperament portraiture ruled in literature it would have been the breath of life, and the late Dean would have been before us almost as plainly as if we had known him.

Even in the three large volumes of Forster's Life of Dickens, so full of personal traits and records by one who knew him most intimately, there is no description of the man that supplements, by colour especially, the several engravings of portraits by artist friends.

Forster's description of him at thirty-five years of age (vol. i., page 79) is most general.

I give the greater part; the indefinite terms in italics:—

"The features were very good. He had a

"capital forehead. Eyes wonderfully beaming. "A firm nose, with full, wide nostrils. A "rather prominent mouth, well-formed, and "symmetrical. The hair was then of a rich "brown and most luxuriant abundance."

No mention of the colour of the eyes, or of the complexion, or the build of the man! His temperament, therefore, can only be guessed.

A young American lady's description (vol. i., page 364) is even more general than Mr. Forster's :-

"He is young and handsome, has a mellow, "beautiful eye, fine brow, and abundant hair."

No colour given here! Reserved for his dress seemingly!

"He had a dark coat, with lighter "pantaloons, a black waistcoat, embroidered "with coloured flowers, and about his neck, covering his white shirt-front, was a black neckcloth, also embroidered in colours, in which were placed two large diamond pins, connected by a chain. A gold watch-chain and a large red rose in his button-hole completed his toilet."

Here, colour everywhere! Strange that one so observant of colour should have overlooked the colour of the hair, the eyes, and the complexion! Impossible, had she known anything of the temperaments!

In contrast; here is a biographic portrait of 140 years ago, when the temperaments still impressed their stamp on literature:—

SIR THOMAS MORE, LORD CHANCELLOR.

"He was of middle stature, well pro-"portioned; his complexion pale; his hair "neither black nor yellow, but between both; "his eyes grey; his countenance amiable and cheerful; his voice clear and distinct; and his body healthful."

Colour is not forgotten here, and as the engraved portrait which accompanies the description shows the face to taper from a broad forehead, and a nose outspread; a compound temperament, in which Nervous characteristics prevail, is indicated.

SHELLEY.

Here is a biographic, almost a temperament portrait of Shelley:—

"In person he was tall and slight (Nervous);
"his eyes were large, and animated with a
"dash of wildness in them (colour wanting);
"his face small, but well-shaped, particularly
"the mouth and chin, the turn of which was
"sensitive and graceful (Nervous); his com"plexion fair and delicate, with a colour in

"the cheek (Sanguine). He had brown hair "(Bilious, if dark brown; Nervous, if light brown), which, though tinged with grey, surmounted his face well, being considerable in quantity, and tending to curl. Like the "Stagyrite, his voice was high and weak. "Though well turned, his shoulders were bent a little, owing to premature thought and trouble (he perished in his twenty-ninth year). The same causes (Nervous) had touched his hair with grey."—Leigh Hunt's "Lord Byron," page 174.

Also of Shelley, Professor Shairp writes:-

"His intellect waited on his temperament, and, so to speak, did its will, caught up one by one the warm emotions as they were thrown off, and worked them up into the most exquisite abstractions."

In Mr. Froude's volumes on Carlyle are many striking examples of word portraiture, in some of which colour and form are minutely given, and I reproduce

a few that have much in them that may be called temperament portraiture:—

THE IRVING FAMILY.

"All these Irvings were of blond, or even "red complexion—red hair a prevailing or "sole colour in several of their families. Gavin "himself (Edward's father) was reddish, or at "least sandy-blond, but all his children had "beautifully coal-black hair, except one girl, "the youngest of the set but two, who was "carroty, like her cousins. The brunette "mother, with her swift black eyes, had pre"vailed so far."

FRANK DILLON.

"A slightly-built man, nimble-looking, and "yet lazy-looking; thin, neatly expressive, "aquiline face; grey, genially-laughing eyes; "something sternly-serious and resolute in "the squarish, fine brow; nose specially "aquiline, thin, and rather small."

Form, not colour, here!

MR. BADHAMS.

"A tight, middle-sized, handsome kind of "man; eyes blue (Sanguine), sparkling, soft; "nose and other features inclining to the "pointed (Nervous), complexion which was the "weak part of him, tending rather to bluish; "face always shaven bare, and no whiskers "left. A man full of hope, full of natural "intellect, ingenuity, invention (Sanguine and "Nervous) . . . true he was, but not sternly "enough, and would listen to imagination and "delusive hopes when Fact said No" (Sanguine and Nervous).

SOUTHEY.

"A lean, grey, white-headed man, of dusky complexion; unexpectedly tall when he rises, and still leaner then; the shallowest chin; prominent snubbed Roman nose; small, care-lined brow; huge bush of white-grey hair on high crown, and projecting on all sides; the most vehement pair of faint, hazel eyes I have ever seen; a well-read, honest, limited (strait-laced even), kindly-hearted, most irritable man."

DICKENS.

"He is a fine little fellow—Boz—I think. "Clear, blue, intelligent eyes; eyebrows that "he arches amazingly; large, protrusive, rather "loose mouth; a face of most extreme "mobility, which he shuttles about, eyebrows, "eyes, mouth and all, in a very singular manner while speaking. Surmount this with a loose coil of common-coloured hair, and set it on a small compact figure, very small, and dressed à la D'Orsay, rather than well—this is Pickwick. For the rest, a quiet, shrewd-looking little fellow, who seems to guess pretty well what he is, and what others are."

TENNYSON.

"A fine, large-featured, dim-eyed, bronze-"coloured, shaggy - headed man is Alfred; "dusty, smoky, free-and-easy, who swims "outwardly and inwardly with great com-"posure in an inarticulate element of tranquil "chaos and tobacco smoke, great now and then when he does emerge—a most restful, brotherly, solid-hearted man."

Admirable as these descriptions are, I cannot doubt that had the hand of the old master been guided by the method of the temperaments, they would have been still more Rembrandt-like, and more lastingly engraven on the memory.

In the following striking description of the late Mr. Fawcett's appearance, by the most practised hand of the day, two nearly full-length engraved portraits are fully supplemented as to form; but colour, which engravings do not give, is almost overlooked; and readers may judge for themselves whether, had the author used the methodical arrangement of the temperaments (page 362), he would have given, as I think he would, a more lifelike and intellectual portrait:—

"I noticed a very tall, gaunt figure "swinging along with huge strides upon the "towing-path. He was over six feet three "inches in height. His chest, I should say, "was not very large in proportion to his "height, but he was remarkably large of "bone and massive of limb. The face was "impressive, though not handsome. "skull was very large; my own head vanished, "as into a cavern, if I accidentally put on his "hat. The forehead was lofty, though rather "retreating, and the brow finely arched. "The complexion was rather dull, but more "than one of his early acquaintances speak " of the brightness of his eye and the "keenness of his glance. The eyes were "full, and capable of vivid expression, though "not, I think, brilliant in colour. "features were strong, and, though not "delicately carved, were far from heavy, "and gave a general impression of remark-"able energy. The mouth, long, thin-lipped, "and very flexible, had a characteristic "nervous tremor, as of one eager to speak "and voluble of discourse. . . . A "certain wistfulness was a frequent shade of expression. But a singularly hearty and cordial laugh constantly lighted up the whole face with an expression of most genial and infectious good humour."

In conversation, as in biography, personal description so generally fails to convey a definite likeness, that a uniform method would undoubtedly be a great gain; and the physical characteristics of the temperaments—four of form and three of colour—being readily remembered, and giving, as they do, a portrait that could not fail to be recognized, might well be adopted.

Its adoption would probably lead to the use of temperament phraseology in reference to single features; as, a sanguine, bilious, lymphatic, or nervous eye; a sanguine, bilious, lymphatic, or nervous complexion, etc.—phrases which indicate associated mental traits. An accepted method of personal description, by insuring clearness of recollection and more conclusive comparison, would be found of value in many important matters.

In cases of identity the evidence of witnesses would be more convincing were they to give the form and colour characteristics of the temperaments, instead of different methodless descriptions, which cannot be compared.

Heredity—including physical characteristics, mental qualities, health, and disease—is an important and interesting subject, not yet sufficiently observed to warrant definite conclusions; nor likely to be, till some method of observing and recording become prevalent; some observers seeing likeness between people, and between portraits and their subjects, where others see none.

The two following extracts, showing failure hitherto, may induce observation and comparison by the method of the form and colour characteristics of the temperaments, in the hope of trustworthy results.

Mr. Buckle, as already quoted (page 13), says:—

"We are completely in the dark as to the circumstances which regulate the hereditary transmission of character, temperament, and other peculiarities. . . None of the laws of hereditary descent connected with the formation of character have yet been generalized, nor is our knowledge much more advanced respecting the theory of temperaments."

Mr. Galton's address on Heredity, at last year's meeting (1885) of the British Association, gave rise to the following remarks in a leading article of *The Times*:—

"Few subjects can be more attractive to "all who desire the welfare of the human "race than an investigation of the principles "which underlie heredity, and which, up to "this time, have baffled all inquiry. The "elements of the problem are so complex, "the tendency to revert to ancestral types "is sometimes so strongly marked, and the "difficulties of the inquiry are so formidable, "that no one has hitherto arrived at any "intelligible basis for predicting the probable "physical or mental characters of the children " of any given parents."

After the above testimony readers may not be inclined to accept without proof that :-

"Sons, according to an observed law of "inheritance, usually inherit the temperament "of their mother's father, and daughters that "of their father's mother, the same types "re-appearing with all their correlated qualities " of form and feature and mental temper "very little neutralised or altered." - The Lancet, 1876, vol. i., page 236.

A law this that startles by its simplicity. Did it hold good, all the brothers of a family would usually be of one temperament, and all the sisters of another; but they certainly are not.

Mr. Starkweather thinks that observation warrants his belief in a very simple law of sex and temperament:—

"At the seaside one often sees whole "families together — father, mother, children. "He will see a portly father, dull and "lymphatic, coupled with a nervous, sprightly "wife; and with them he will find a troop of boys, inheriting probably much more of the mother's temperament than the father's. "On the other hand, when he meets a thin and active father, perhaps resting from the exertions of his profession, with a stout and pleasant, but indolent or lymphatic mother, he will as surely find a family of daughters who have evidently inherited the father's activity. The cases of this sort "that I have met with in my travels, every

"one confirming my theory, are innumerable, and I doubt not that others will have a similar experience."—The Law of Sex (page 263).

Whoever may formulate a law of physical heredity should not overlook that there may be a likeness to more than one relation, near or distant.

In the memoir by Lodge, which accompanies the engraved portrait* of Anne Clifford, Countess of Dorset, Pembroke, and Montgomery, is the following personal description by herself:—

"I was very happy in my first constitu"tion, both in mind and body; both for
"internal and external endowments; for never
"was there a child more equally resembling
"father and mother than myself. The colour of
"mine eyes was black, like my father's; and
"the form and aspect of them was quick and
"lively, like my mother's. The hair of my

^{*} Portrait No. xi., end of this vol.

"head was brown, and very thick, and so "long that it reached to the calf of my "legs when I stood upright; with a peak "of hair on my forehead, and a dimple "on my chin: like my father, full cheeks; and "round face, like my mother; and an exquisite "shape of body, resembling my father."

In his valuable, interesting, and wellknown work, Hereditary Genius, Mr. Galton has, by method and extensive research, traced inheritance of mental superiority in a very great number of eminent men and women; but should acquaintance with the doctrine of the temperaments become general, readers will wish that he had extended his research to their physical characteristics, and described them by some method from which the temperament could be inferred.

CONCLUSION.

As advocacy of the practical value of any subject can have no great weight unless supported by proof, I hope that some readers who have become familiar with the temperaments, and have the required field, may observe the association between physical characteristics and the mental qualities and aptitudes that lead to success in studies and pursuits, and make known the results of their observations.

Teachers might make valuable use of their great opportunities of observing the temperaments of youths and establishing conclusions that could not be gainsaid.

"The conditions in schools are obviously "favourable for all kinds of statistical inquiries. "Boys of similar antecedents, age, and occupa-

"tions are grouped together, and are under

"inspection for long periods. 'What excellent "'psychological work might be accomplished," "says an author who has given a notable "example of the sort of inquiries that might "be carried out in schools; 'what excellent "' psychological work might be accomplished "'if a schoolmaster were now and then found "' capable and willing to codify, in a scientific "' manner, his large experience of boys-to "' compare their various moral and intellectual "'qualities, to classify their natural tempera-"'ments, and generally to describe them as "'a naturalist would describe the fauna of "'some new land. The masters, however, "come and go, their experiences are lost, "or almost so, and the incidents on which "'they are founded are forgotten, instead "'of being stored and rendered accessible "'to their successors." - J. Crichton Browne, LL.D., F.R.S., in "The Book of Health" (pages 271, 272).

Examiners have a more concentrated field than teachers, and by making use of it would no doubt

arrive at valuable conclusions. What could be more valuable than tables giving the temperaments of candidates, the subjects they selected, those they passed in, and those they failed to pass?

The secretaries of our learned and other societies might, by the method of the *Scheme*, make us acquainted with the temperaments of their eminent members, and thereby establish a connection between physical characteristics and success in science, art, literature, professions, and other occupations, that should influence the choice of a calling.

The medical profession would do good service by observing, for general guidance, the relation which I have suggested (page 253) between food, climate, the ordinary causes of disease, or derangement of health, and the temperaments.

The medical officers of our large and ever-increasing asylums for the insane might tabulate observations that would establish a connection between the temperaments of patients, the character of their delusions, and the causes that induced them,—knowledge that might be available in counteracting the tendency to attack, by showing the probable direction of its approach.

The medical advisers of Life Assurance Societies, by carefully noting the temperament of the assured, might evolve a difference in the death-rate of those of different temperaments that would lead to a difference in the rate of premium.

Many others might lend a helping hand to give precision to the subject, and I am hopeful that some may have become sufficiently interested in it to do so. Acquaintance with the mental qualities and traits of character that are associated with the physical characteristics of the temperaments will be found useful in many of the ordinary affairs of life,—obviously, in the selection from candidates of the one naturally best qualified for the work.

The following extract shows that they have begun in America to consider physical characteristics in estimating fitness:—

"A very bitter sentiment of rivalry has "sprung up between fair-haired women and brunettes in Washington. The feeling has arisen amongst lady applicants for situations as clerks in the Civil Service, in which department women as well as men can be appointed. As a rule, and this was the original grievance of blondes and brunettes alike, favouritism was, alleged the ladies, shown to male applicants; and now another accusation is brought by fair-haired applicants, who are complaining that, when vacancies have to be filled, and women are accepted, it is invari-

"ably the dark-haired sisterhood upon whom "the appointment is bestowed. The officials "charged with making this distinction to the "prejudice of the blondes, excuse themselves "by saying that the latter are apt to be "quick-tempered, that they are less steady at "work, and, in short, do not make such "good clerks as the brunettes."—The Evening Standard, February 17th, 1885.

I am sanguine that all who become familiar with the temperaments and their associated mental qualities, will not only find guidance in forecasting the action of those they may have to do with, but make themselves and others happier, by greater tolerance of the different ways of those who differ from them in temperament.

Many readers may be as glad as I am to learn that Dr. Richardson, who has

so successfully rendered many medical subjects familiar to the general reader, may be expected to add a volume on The Temperaments to his well-known works.

In a lecture delivered in 1883, on "Felicity as a Sanitary Research," he says:—

"There are some constitutional differences de"termined by temperaments, which are of first
"importance. Of the four primary tempera"ments, the sanguine, the nervous, the bilious,
"the lymphatic, and of their relation to felicity,
"a volume might be written, and I have col"lected the facts relating to the temperaments
"of over a thousand persons towards such a
"work."

CLASSIFICATION OF FACES.

The following selection from Lodge's well-known collection of engraved portraits* is given to familiarize observers with four forms of the face; the square; the tapering; the oval; and the semi-oval: their long and broad varieties; and the melancholic form—an easily remembered classification which may help them to recognize and read every form of face.

I hoped to reproduce portraits in which the colour and form characteristics of the temperaments are seen, but the results were unsatisfactory, and I have, therefore, to advise observers to look for them in every portrait, and ascertain as far as possible the associated mental traits.

I am sanguine that general familiarity

^{*} Reproduced by the Typographic Etching Company.

with the colour and form characteristics of the temperaments may lead to the indefinite phrase "I see it in his face" being always supplemented as follows:—

I see it in his square face.

I see it in his tapering face.

I see it in his oval face.

I see it in his outspread nose.

I see it in his short neck.

I see it in his build.

I see it in his blue eyes.

I see it in his black eyes.

I see it in his lustreless eyes.

So of the colours of the complexion and hair.

Only by such or some other method can readers of faces compare their readings with those of others, and so establish the natural association of mental with physical characteristics.

A SELECTION

FROM

LODGE'S HISTORICAL PORTRAITS,
SHOWING THE CHIEF FORMS OF FACES.

ARRANGEMENT OF THE PORTRAITS.

Nos.		Forms of the Face.
I, 2		. Square.
3, 4, 5, 6	1.	. Tapering.
7		. Oval.
8		. " (long).
9, 10 .		. " (broad).
11, 12, 13		. Semi-oval.
14, 15 .		. " (long).
16, 17 .		. " (broad).
18, 19, 20,		. Oblong.
22, 23 .		. Tapering (long).
24, 25 .		. " (broad).
26, 27 .		. The Melancholic.

NOTE.

The Scheme of the pure temperaments, chap. iv., may be referred to for the mental traits of the square and tapering faces. Those of the oval ace are given in chap. vii. All other forms of the face being compounds or varieties of these three, the assignment of their mental traits should be relative to the proportion of square, tapering, or oval features.

SQUARE FACES.

See Scheme, Chap. iv.

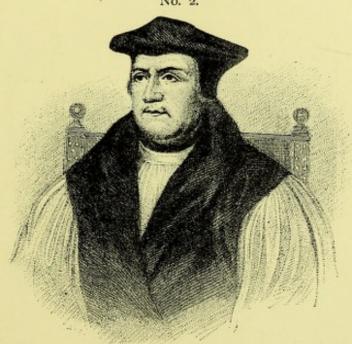
No. 1.



ADAM, FIRST VISCOUNT DUNCAN.

Ob. 1804.

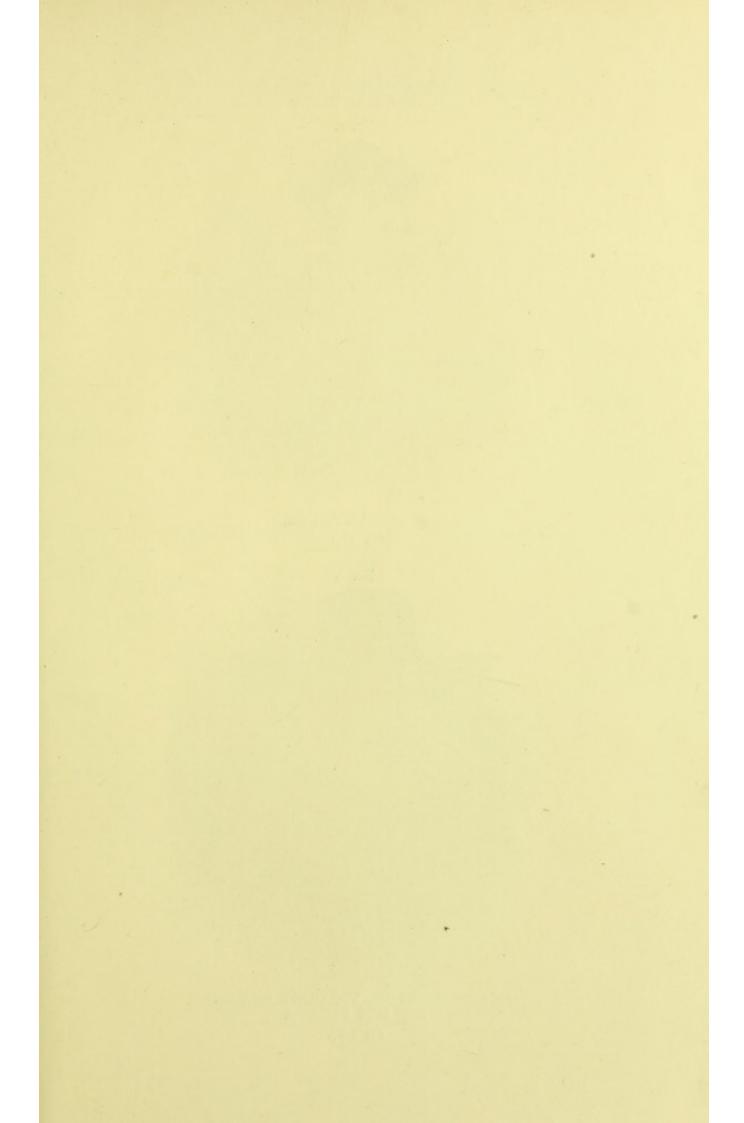
No. 2.



MATTHEW PARKER, ARCHBISHOP OF CANTERBURY.

Ob. 1575.





TAPERING FACES.

See Scheme, Chap. iv.

No. 3.



CARDINAL ALLEN. Ob. 1594.



THOMAS EGERTON, VISCOUNT BRACKLEY.

Lord High Chancellor. Ob. 1617.

TAPERING FACES.

No. 5.



WILLIAM POWLETT, MARQUIS OF WINCHESTER.

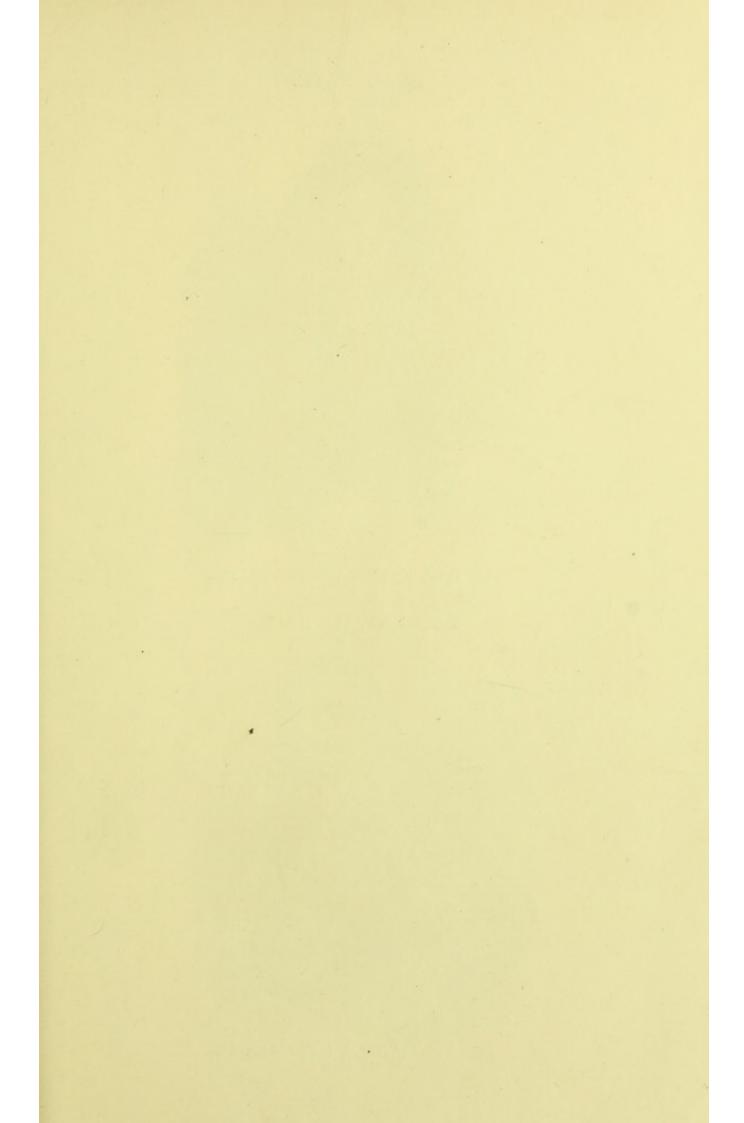
Ob. 1572.



GEORGE VILLIERS, DUKE OF BUCKINGHAM.

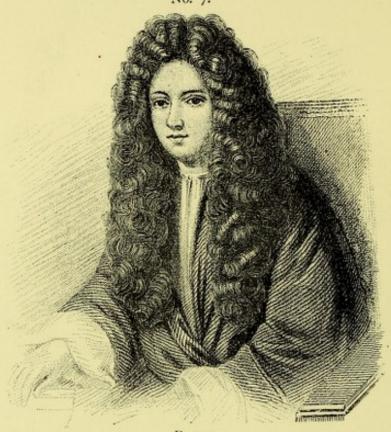
Ob. 1628.





OVAL FACE.

See page 157. No. 7.



Page 71. THE HON. ROBERT BOYLE. Ob. 1691.

LONG OVAL FACE.



ROBERT GREVILLE, LORD BROOKE.

BROAD OVAL FACES.

No. 9.



WILLIAM FITZ-MAURICE PETTY, FIRST MARQUIS OF LANSDOWNE.

Ob. 1605.

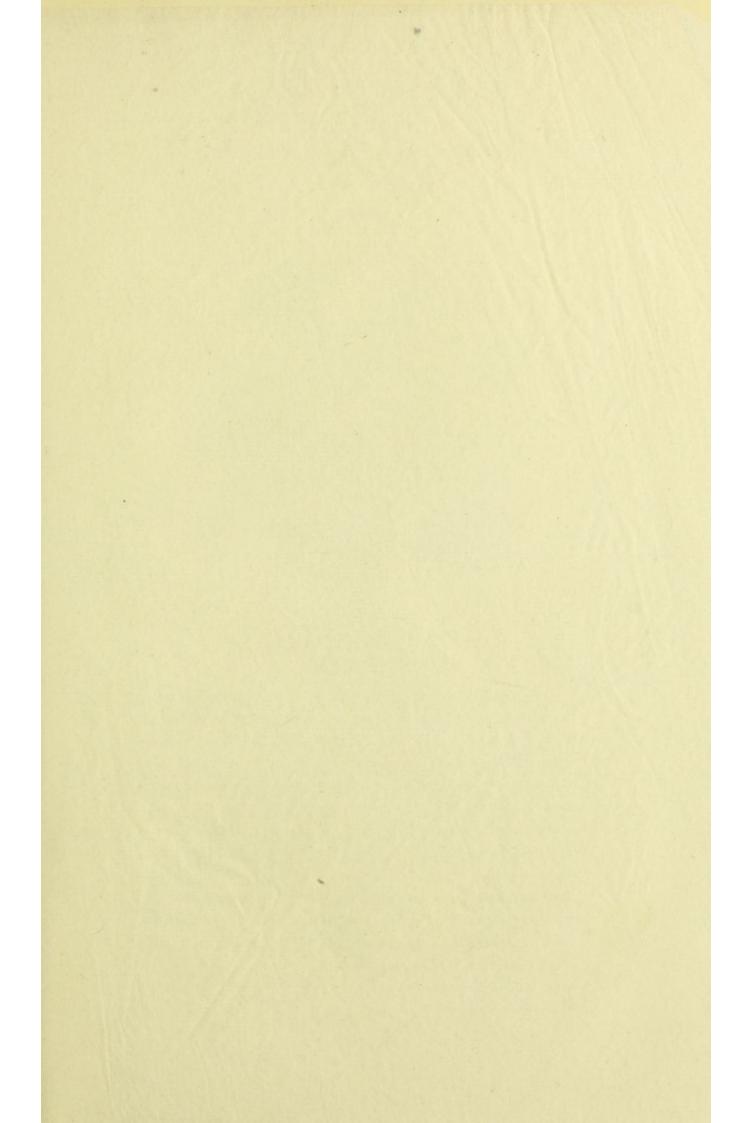
No. 10



ANNE HYDE, DUCHESS OF YORK.

Ob. 1671.









SEMI-OVAL FACE.

(The broad forehead of the tapering form).

No. 11.



LIKENESS TO BOTH PARENTS. See page 382.

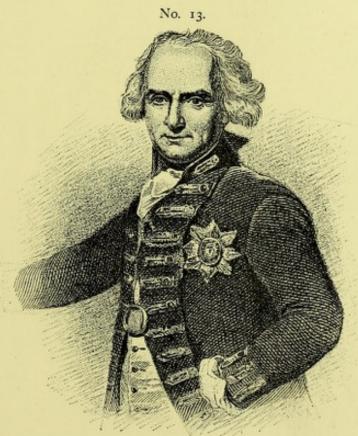
"I was very happy in my first constitution, both in mind and body; both for internal and external endowments; for never was there a child more equally resembling both father and mother than myself. The colour of mine eyes was black, like my father's, and the form and aspect of them was quick and lively, like my mother's. The hair of my head was brown, and very thick, and so long that it reached to the calf of my leas when I stood upright; with a peak of hair on my forehead, and a dimple on my chin: like my father, full cheeks; and round face, like my mother; and an exquisite shape of body, resembling my father."—Memoir of Anne Clifford, Countess of Dorset, Pembroke and Montgomery, in Lodge's Historical Portraits.

SEMI-OVAL FACES.

No. 12



LADY JANE GREY. Ob. 1554.



ALEXANDER HOOD, VISCOUNT BRIDPORT. Ob. 1814.





LONG SEMI-OVAL FACES.



PHILIP HOWARD, EARL OF ARUNDEL.

Ob. 1595.

No. 15



JOHN, DUKE OF MONTAGU.

Ob. 1749.

BROAD SEMI-OVAL FACES.

No. 16.

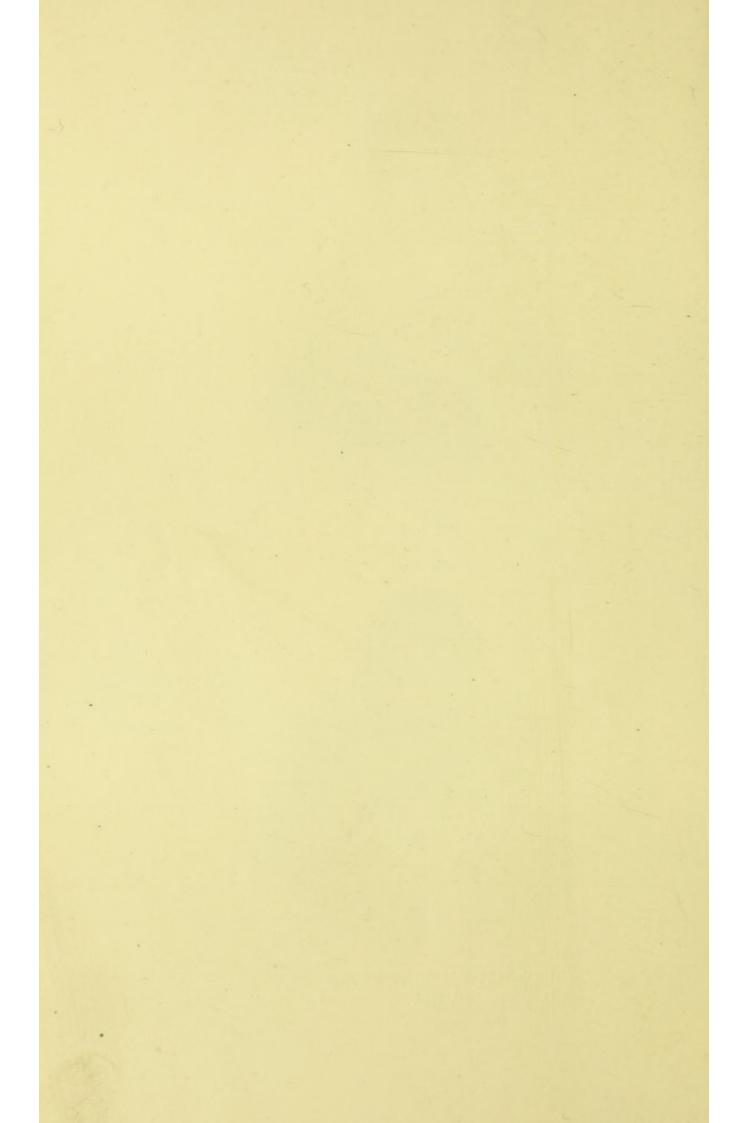


QUEEN ANNE.
Ob. 1714.

No. 17.



AUGUSTUS, VISCOUNT KEPPEL. Ob. 1786.





OBLONG FACES.

No. 18.



HENRY ST. JOHN, VISCOUNT BOLINGBROKE Ob. 1751.

No. 19.



WILLIAM PULTNEY, EARL OF BATH. Ob. 1764.

OBLONG FACES.

No. 20.



SIR JOHN MORE.

Ob. 1533.



WILLIAM WARHAM, ARCHBISHOP OF CANTERBURY.

Ob. 1532.





LONG TAPERING FACES.

No. 22.



SIR WILLIAM MAITLAND, OF LETHINGTON.

Ob. 1573.



· AMBROSE DUDLEY EARL OF WARWICK,
Ob. 1590.

BROAD TAPERING FACES.

No. 24.



KING EDWARD THE SIXTH. Ob. 1553.

No. 25.



JOHN GRAHAM, VISCOUNT OF DUNDEE. Ob. 1689.





THE MELANCHOLIC FACE.

No. 26.



CARDINAL POLE.

Ob. 1557

No. 27.



HENRY HOWARD, EARL OF SURREY
Ob. 1547

There are other forms of faces besides those seen in the portraits, but, like the semi-oval (No. XI.), they are obviously compounds of two of the chief forms the square, the tapering, and the oval.

Observation of the forms of a hundred faces gave the following results:—

4		Square.		
21		Tapering.		
8		Oval.		
3		,,	(long).	
6		,,	(broad).	
20	. •	Semi-Oval.		
12		,,	(long).	
9		,,	(broad).	
5		Oblong.		
4		Tapering	(long).	
4		,,	(broad).	
I		The Melancholic.		
3		Compound	of the Tapering	

and Square (the forehead broad; the chin square).

POPULAR WORKS

PUBLISHED BY

CROSBY LOCKWOOD & CO.,

7, Stationers' Hall Court, Ludgate Hill, E.C.

SCHOOLDAYS OF EMINENT MEN. Containing School and College Lives of the most celebrated British Authors, Poets, and Philosophers; Inventors and Discoverers; Divines, Heroes, Statesmen, &c. By John Timbs. With Thirteen Views of Public Schools, and Twenty Portraits by Harvey. Fcap., 3s. 6d. cloth.

"A book to interest all boys but more especially those of Westminster, Eton, Harrow, Rugby, and Winchester; for of these the accounts are full and interesting."—NOTES AND QUERIES.

"THE LAWGIVER OF THE PLAYGROUND."

THE BOY'S OWN BOOK: a Complete Encyclopædia of Sports and Pastimes, Athletic, Scientific, and Recreative. A New Edition, revised, with many Additions and Improvements, including the Newest Games and Amusements; with more than 600 Illustrations (many of them quite new), 10 Vignette Titles printed in gold, and over 700 pages. 8s. 6d. handsomely bound in cloth.

"'The Boy's Own Book' has had many imitators, but they have been but puny counterfeits, and the new edition just issued may bid defiance to them all. Brought up to the present day, it is itself alone the book for boys."—BAILY'S MAGAZINE OF SPORTS.

"The Boy's Own Book is still the book which English lads take most delight in, and read with the greatest interest."—CIVIL SERVICE GAZETTE.

"Mr. Lockwood's 'Boy's Own Book' is the real original work which we knew in days long gone by, but in a new and much enlarged form. To name it is to praise it."—SATURDAY REVIEW.

"Time and thought have rendered it perfect."-ART JOURNAL.

TRUTHS ILLUSTRATED BY GREAT AUTHORS: a Dictionary of nearly Four Thousand Aids to Reflection, Quotations of Maxims, Metaphors, Counsels, Cautions, Proverbs, Aphorisms, &c., &c. In Prose and Verse. Compiled from the Great Writers of all Ages and Countries. New and Cheaper Edition, small crown 8vo, 568 pp. cloth, bevelled edges, 3s. 6d.

"The quotations are perfect gems; their selection evinces sound judgment and an excellent taste."—DISPATCH.

"We know of no better book of its kind."-EXAMINER.

THE TWIN RECORDS OF CREATION; or, Geology and Genesis, their Perfect Harmony and Wonderful Concord. By George W. Victor Le Vaux. Numerous Illustrations. Fcap. 8vo, 5s. cloth.

"A valuable contribution to the evidences of Revelation, and disposes very conclusively of the arguments of those who would set God's works against God's word. No real difficulty is shirked, and no sophistry is left unexposed."—The Rock.

TALES FROM SHAKESPEARE. Designed for the Use of Young Persons. By Charles and Mary Lamb. Sixteenth Edition, with Steel Portrait and Twenty full-page Engravings by Harvey. Fcap. 8vo, 3s. 6d. extra cloth gilt.

TALES FROM CHAUCER, IN PROSE. With a Memorial of the Poet. Designed chiefly for the Use of Young Persons. By Chas. Cowden Clarke, Author of "The Riches of Chaucer," &c, New and revised Edition, with Twelve full-page Engravings. Fcap. 8vo, 3s. 6d. extra cloth gilt.

"Mr. Clarke's worthy purpose is worthily carried out, and the tales will be read with pleasure by those who are acquainted with the originals, and with eager delight by the young who are unable as yet to comprehend Chaucer's terse and noble verse."—NEWS OF THE WORLD.

"Mr. Clarke has done that for Chaucer which Charles and Mary Lamb did for Shakespeare."—CITY PRESS.

THE RICHES OF CHAUCER: In which his Impurities have been Expunged; his Spelling Modernised; his Rhythm Accentuated; and his Obsolete Terms Explained; with Explanatory Notes and a Memoir of the Poet. By Charles Cowden Clarke, Author of "Tales in Prose from Chaucer," &c. Third Edition, carefully Revised. With fine Steel Portrait of Chaucer, and Woodcuts. Crown 8vo, elegantly printed (642 pages), 7s. 6d. Roxburgh binding.

"Mr. Clarke has modernised Chaucer's spelling, but without impairing the antique beauty of his verse; and his system of accentuation removes the last stumbling-block from the feet of the general reader."—TIMES.

"Innumerable readers, who would have turned away alarmed at the antique orthography of the genuine texts, have been tempted by the facility with which they have mastered the 'Canterbury Tales,' and other poems in Mr. Clarke's modernised form, to study Chaucer, and appreciate the pathos, imagery, and humour which abound in his writings."—Notes and Queries.

ONE BEFORE: A Manual of Consolation for the Bereaved and a Well of Sympathy for the Sorrowing, filled from Many Sources. Being a Collection of Great Thoughts on Bereavement, Consolation, and Resignation, from the Works of Celebrated Poets, Authors, and Divines of all ages, and from the inspired pages of Holy Writ. By Henry Southgate, Author of "Many Thoughts of Many Minds," &c. Fourth Edition, revised. Crown 8vo, 400 pp., 3s. 6d. cloth.

"This exquisite selection of prose and verse—made with the judgment which might be expected from Mr. Southgate's experienced taste, will be welcome to many a sorrowing heart."—Public Opinion.

"In the present compilation Mr. Southgate has exceeded his former efforts, and has produced a book full of the best, the most devout, and most earnest outpourings of our greatest writers upon subjects which are most deeply rooted in human nature,"—ENGLISH CHURCHMAN.

CROSBY LOCKWOOD & Co., 7, Stationers' Hall Court, Ludgate Hill, E.C.

"A WORLD OF THINGS TOGETHER BROUGHT."

Now Ready, in Six Double Volumes, 30s., handsomely half-bound.

THE COMPLETE SET OF

THINGS NOT GENERALLY KNOWN.

By JOHN TIMBS, F.S.A.

** THE ATHENEUM says:—" Anyone who reads and remembers Mr. Timbs' Encyclopædic varieties should ever after be a good tea-table talker, an excellent companion for children, a 'well-read person,' and a proficient lecturer."

Contents of the Double Volumes (sold separately, price 5s. each, half-bound) :-

- Vol. I. GENERAL INFORMATION. ("Things Not Generally Known"). 5s.
 - " II. CURIOSITIES OF SCIENCE. 5s.
 - " III. CURIOSITIES OF HISTORY; POPULAR ERRORS. 5s.
 - " IV. NOTABLE THINGS; THINGS TO BE REMEMBERED IN DAILY LIFE. 5s.
 - ", V. A GARLAND FOR THE YEAR; SOMETHING FOR EVERYBODY; AND KNOWLEDGE FOR THE TIME. 5s.
 - " VI. MYSTERIES OF LIFE, DEATH, AND FUTURITY; PRE-DICTIONS REALISED IN MODERN TIMES. 5s.
 - * * Sold also in Twelve Single Volumes as follows :-
 - 1. THINGS NOT GENERALLY KNOWN FAMILIARLY EXPLAINED. 1st Series, 2s. 6d. cloth.
 - 2. THINGS NOT GENERALLY KNOWN FAMILIARLY EXPLAINED. 2nd Series, 2s. 6d. cloth.
 - 3. Curiosities of Science, Past and Present. 1st Series. Fcap., 2s. 6d. cloth.
 - 4. CURIOSITIES OF SCIENCE, Past and Present. 2nd Series. 2s. 6d. cloth.
 - 5. CURIOSITIES OF HISTORY. 28. 6d. cloth.
 - 6. POPULAR ERRORS EXPLAINED AND ILLUSTRATED. 2s. 6d. cloth.
 - 7. NOTABLE THINGS OF OUR OWN TIME. 2s. 6d. cloth.
 - 8. THINGS TO BE REMEMBERED IN DAILY LIFE. With Personal Experiences and Recollections. 2s. 6d. cloth.
 - 9. A GARLAND FOR THE YEAF and SOMETHING FOR EVERYBODY. 2s. 6d. cloth.
- 10. KNOWLEDGE FOR THE TIME. 28. 6d. cloth.
- 11. MYSTERIES OF LIFE, DEATH, AND FUTURITY. 28. 6d. cloth.
- 12. PREDICTIONS REALISED IN MODERN TIMES. 28. 6d. cloth.

CROSBY LOCKWOOD & Co., 7, Stationers' Hall Court, Ludgate Hill, E.C.



