INDEX TO ACHIEVEMENTS
OF
NEAR KINSFOLK
OF SOME OF THE
FELLOWS OF THE ROYAL SOCIETY.

BY
FRANCIS GALTON, F.R.S.

(Entered at Stationers' Hall.)
PREFACE.

It is now practically certain, from wide and exact observation, that the physical characters of all living beings, whether men, other animals, or plants, are subject approximately to the same hereditary laws. Also that mental qualities, such as ability and character, which are only partially measurable, follow the same laws as the physical and measurable ones.

The obvious result of this is that the experience gained in establishing improved breeds of domestic animals and plants is a safe guide to speculations on the theoretical possibility of establishing improved breeds of the human race.

It is not intended to enter here into such speculations, but to emphasize the undoubted fact that members of gifted families are, on the whole, appreciably more likely than the generality of their countrymen to produce gifted offspring.

No extensive collection exists of the biographies of Gifted Families, as distinguished from biographies of individuals; we are therefore without means of obtaining an idea of the distribution of ability in our very mixed race, incomparably more mixed than that of any domestic animal, where some conscious selection is always at work. We cannot tell, a priori, how far ability is sporadic at the present time, and how far it clusters in families. As a first attempt to supply the deficiency, both as to matter and form, I submit the present pamphlet, the result of inquiries made through a circular letter to all Fellows of the Royal
Society, as to the "noteworthy" achievements of their near relatives. The standard of "noteworthiness" was defined as achievement in any occupation which was judged by the writer to be at least equal in dignity, among the fellows of the relative, to that of F.R.S. among men of science. It was the best standard I could think of; no one has as yet suggested a better, and notwithstanding its obvious faults it has served well. About half of the 454 fellows, or thereabouts, replied to my circular. Many of the replies were extremely interesting, while not a few were very jejune; still, I have collected enough material to be serviceable in many ways. I wrote a brief statistical article upon those I had received up to a certain date, in Nature on August 11. Evidence was there given that ability, as measured by achievement, tended in a marked degree to be a family characteristic.

Besides the families so distinguished there were others reputed to have a high level of ability, whose members had nevertheless failed to achieve anything noteworthy; again, there were others in whom the ability was, in the language of horticulturists, a "sport"; it was shared by none of the collaterals or ancestry, but, presumably like all sports, may be highly capable of producing its like in descent. The difficulty of estimating the ability of women, who have few opportunities of displaying it in a measurable way, was partly met by asking for the achievements of the brothers of the females, which are comparable on equal terms with those of the brothers of males.

Having collected and discussed my material, the question arose how best to present the results so as to bring out the fact that ability, as measured by achievement, is really clustered to a remarkable degree in certain families. Something more vivid was required than statistical figures; something in the nature of those Family Biographies above mentioned. It was, however, difficult to give them, because, although no stipulation whatever was made in the circular letter of inquiry that the replies should be treated as private documents, I found that a feeling existed that such restriction was implied. I could not disregard this view without risking the accusation of breach of trust. At length I thought of the course that has been adopted here. It is to take the replies as guides only, and rarely to quote from them, restricting the mention of achievements to those that have already been published; to extract the account of them, as a general rule, from publications where they appeared, and to give references as far as seemed reasonably desirable. The publications might be official or only local, but, as a matter of convenience, the references are in almost all cases either to the "Dictionary of National Biography" for deceased persons, and to the "Encyclopaedia Britannica" or to "Who's Who" for living ones. A biography in either of the first two is in itself a mark of distinction; it is so, but in a much less degree, in "Who's Who." They all have the merit of giving detailed accounts of the achievements of the person in question, while the "Dict. N. Biog." gives full references to the memoirs and other sources whence the information in each article was derived.

The present pamphlet is styled an "Index," because it falls far short of being a collection of biographies and contains no account of failures. On the other hand, it does more than indicate families deserving of minute study, for it gives a fair idea of the quality of ability that dominates in each. This would be sufficient, if the collection were largely added to, to enable families to be sorted into different groups.
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according to their prevailing characteristic, each group being convenient for separate study. I could add other remarkable pedigrees from the same source, but these few will serve as a preliminary attempt to show the quality of material that exists, and a convenient form of treating it, which is the primary purpose of this small pamphlet.

The average number of kinsfolk in each degree should be borne in mind when reading the "Index." This was discussed by me in a paper in Nature, September 29. From that discussion I now conclude that the average numbers of near kinsmen who attain an age at which they would have achieved something noteworthy, if they possessed the necessary qualifications, would be roughly as follows:—grandfathers, 2 (i. father's father and mother's father); father, 1; uncles, 2 (i. father’s brother and mother’s brother); brothers, 1; first cousins, 4 (see Table of Abbreviations); making 10 altogether. Sons and nephews are rarely taken into account here, because they usually had not attained a sufficient age to enable them to do justice to their potentialities.

Persons who have earned a place, by virtue of their achievements, in the "Dict. N. Bio.," or in the "Ency. Brit.," or even in "Who's Who," are so far rarer than one in ten, that the appearance of one of them within the inner degrees of kinship of Fellows of the Royal Society, would give a presumption of hereditary ability; but when, as in the families who are indexed here, an average of four of these noteworthy persons fall within those near degrees, the presumption grows into certainty.

The connection between achievement and ability is technically known as Correlation, though it be of a complex, entangled, and discontinuous kind. Still, it must be governed by the law that links every pair of systems of correlated variables. Let the members of one of the two systems be called "Subjects," and those of the other "Relatives"; then, although we can never guess beforehand what Relative will be associated with any particular Subject, we can tell something about the group of Relatives that will be associated with any considerable number of similar Subjects; namely, that the average of those Relatives will always be less exceptional than those Subjects. In other words, very high achievement will, on the average, be associated with only high ability; high achievement with moderately high ability; average with average; low with moderately low; very low with low. It is as yet impossible to say much more than this in respect to achievement and ability.

Arrangements are in progress for an inquiry into the Biographies of Modern Families, of every social grade, each of these families being distinguished, as a whole, for Ability, Character, or Physique. Chief among these is the following, as extracted from the Times of October 27:

London, October 26.—At their meeting this afternoon the Senate had before them, and on the recommendation of the Academic Council, accepted an offer from Mr. Francis Galton, F.R.S., to endow a Fellowship in the University for the promotion of the study of "National Eugenics," defined as "the study of the agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally." The person appointed to this Fellowship will be required to devote the whole of his time to the study of the subject, and in particular to carry out investigations into the history of classes and families, and to deliver lectures and publish memoirs on the subject of his investigations. The endowment is sufficient to provide not only for the Fellowship, but also for the salary of an assistant, and for the general expenses of the contemplated work, which it is intended to place in one of the colleges or other institutions connected with the University. Full particulars of the post will be published shortly.
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Many persons have expressed interest in the progress of inquiries of this character. I hope, therefore, that some may be disposed to assist actively in procuring and sending information. Blank forms to receive the entries will be sent on application.

It will be assumed that free use may be made of the information that is furnished, unless otherwise stated.

FRANCIS GALTON.

42 Rutland Gate, S.W.
October, 1904.

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<th>Table of Abbreviations.</th>
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<tr>
<td><strong>Males</strong></td>
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<td>Grandfather paternal</td>
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<tr>
<td>&quot; &quot; maternal</td>
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<tr>
<td>Father</td>
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<td>&quot; &quot; maternal</td>
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<td>Uncle</td>
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<td>Nephew brother's side</td>
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<td>Male first cousins</td>
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<td>uncle</td>
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<td>2 son of maternal</td>
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<td>3 son of paternal</td>
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<td>aunt</td>
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<td>4 son of maternal</td>
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<td>aunt</td>
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The kinships are reckoned from the person mentioned in the heading to the list, whom we may call P. Then fa bro means "P's father's brother is"; me si son means "P's mother's sister's son is."

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fa fa, Thomas Booth, successful merchant and ship-owner at Liverpool.

fa bro, Henry Booth (1788-1869), railway projector, cooperated with Stephenson in applying steam to locomotion, published much relating to railways, and invented mechanical contrivances still in use on railways; secretary and then railway director.—[" Dict. N. Brit.", 5. 38a.]

fa bro, James Booth, C.B. (1796-1886), Parliamentary draughtsman; became permanent secretary to the Board of Trade.

me si son, Charles Crompton, fourth wrangler, Q.C., and for some years M.P. for the Leek Division of Staffordshire (see p. 17).

me si son, Henry Crompton, a leader in the Positivist Community; authority on Trades Union law, and author of "Industrial Conciliation" (see p. 17).

me si son, Sir Henry Enfield Roscoe, F.R.S., q.v.

fa fa, Sir Thomas Burdon, Kt., several times Mayor of Newcastle, knighted for his services in quelling a riot.

me fa, Sir James Sanderson, Bart., M.P., Lord Mayor of London; a successful merchant.

fa, Richard Burdon-Sanderson, fellow of Oriel College, Oxford; graduated first class and gained Newdigate prize; was secretary to Lord Chancellor Eldon.

bro, Richard Burdon-Sanderson, the first promoter of the "conciliation board" of coal owners and colliers at Newcastle-on-Tyne, and of the first reformatory in Northumberland.

si son, Rt. Hon. Richard Burdon Haldane, P.C., M.P., high honours at Edinburgh and three other Scotch universities. Author of "Life of Adam Smith" and of memoirs on education.—["Who's Who."]

si son, John Scott Haldane, M.D., F.R.S. (b. 1880), university lecturer on physiology at Oxford; joint editor and founder of Journal of Hygiene.—["Who's Who."]

si da, Elisabeth Sanderson Haldane, "Life of Professor Ferrier" and other works; promoter of education and of reforms in Scotland.

More distant kinmen and connections.

fa me bro, John Scott, first Earl of Eldon (1751-1838), famous Lord Chancellor of England.—["Dict. N. Bogn.," 51, 49.]

fa me bro, William Scott, first Baron Stowell (1754-1856), eminent maritime and international lawyer; judge

of Some of the Fellows of the Royal Society

Charles Robert Darwin, F.R.S. (1809-1882), the celebrated naturalist. The dates of his works are "Voyage of the Beagle," 1839; "Origin of Species," 1859; followed by a succession of eight important volumes ranging from 1862 to 1881, each of which confirmed and extended his theory of descent. Among the very numerous biographical memoirs it must suffice here to mention "Life and Letters," by Francis Darwin; and "Dict. N. Bogn.," 14, 72.

fa fa, Erasmus Darwin, M.D., F.R.S. (1731-1802), physician, poet and philosopher. Author of "Botanic Garden," "Zoonomia," and other works, in which he maintained a view of evolution subsequently expounded by Lamarck.—["Life," by Ch. Darwin, "Dict. N. Bogn.," 14, 84.]

fa, Robert Waring Darwin, M.D., F.R.S. (1766-1848), sagacious and distinguished physician, described by his son, Charles R. Darwin, as "the wisest man I ever knew."—["Life and Letters of Charles Darwin," 1, 10-20.]

fa bro, Charles Darwin (1788-1798), of extraordinary promise, gained first gold medal of "Escolapiusian Society for experimental research; died from a dissection wound, aged twenty; many obituary notices.—["Life and Letters of Charles Darwin," 1, 7.]

bro, Erasmus Darwin; see Carlyle's inexact description, and the appreciations of him by his brother and others, in "Life and Letters of Charles Darwin," 1, 21-25.


me fa, Josiah Wedgwood, F.R.S. (1730-1795), the
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famous founder of the pottery works.—["Dict. N. Biol.", 13, 140.]

m. bro, Thomas Wedgwood (1771-1805), an experimenter in early life, and in one sense the first to create photography; a martyr to ill-health later. Sydney Smith knew "no man who appeared to have made such an impression on his friends," and his friends included many of the leading intellects of the day.—["Dict. N. Biol.", 13, 140.]

wife's f. fa (she was her husband's f. bro dau), Josiah Wedgwood, F.R.S.; see above.

wife's bro dau, Julia Wedgwood, essayist.

son, Francis Darwin, F.R.S. (b. 1843), botanist; biographer of his father; reader in botany at Cambridge, 1870-1873; foreign sec. Royal Society. Author of botanical works and memoirs.—["Who's Who."]

son, George Darwin, F.R.S. (b. 1845), second wrangler, 1868; Plumian professor of astronomy and experimental philosophy, Cambridge. Author of many papers in the Philosophical Transactions relating to tides, physical astronomy, and cognate subjects; president elect of British Association in 1905 at Cape Town.—["Who's Who."]

son, Horace Darwin, F.R.S. (b. 1851), engineer and mechanician; joint founder of the Cambridge Scientific Instrument Co. and its proprietor, but now a limited company, of which he is chairman.—["Who's Who."]

son, Major Leonard Darwin, late R.E., second in the examination of his year for Woolwich; served on several scientific expeditions, including transit of Venus of 1874 and 1882; Staff Intelligence Dep. War Office, 1884-90; M.I. for Lichfield, 1892-95. Author of "Bimetallism," "Municipal Trade."—["Who's Who."]


fa fa, William Horsley, Mus. Bac., Oxford (1774-1858), musical composer, especially of glees, and writer on musical topics.—["Dict. N. Biol.", 13, 140.]; and Grove's "Dict. of Music."]

m. fa, Charles Thomas Haden, a rising London physician, who initiated a treatment for gout, much noted at the time; d. young in 1833.—[Unpublished information.]

fa, John Calcraft Horsley, R.A., distinguished painter.—["Who's Who."]


m. bro, Sir Seymour Haden (b. 1816), surgeon; a well known sanitary, especially in respect to the disposal of the dead, and artist in respect to etching; founder and president of the R. Society of Painter Etchers; Grand Prix, Paris, 1889 and 1900; many publications.—["Who's Who."]

fa 2i son, Esmard Brunel, Chancellor to the Diocese of Ely; ecclesiastical barrister.

Ancestors in more remote degrees.

fa fa, John Wall Calcraft (1766-1821), composer, mainly of glees and catches; published "Musical Grammar," 1806.—["Dict. N. Biol.", 13, 140.]; and Grove's "Dict. of Music."

fa fa bro, Sir Augustine Wall Calcraft, R.A. (1779-1844), distinguished painter, mainly of landscapes; knighted, 1837.—["Dict. N. Biol.", 13, 140.]; and Grove's "Dict. of Music."

fa fa fa, Thomas Haden, the principal doctor in Derby, and of great influence in the town; was three times mayor.—[Unpublished information.]

wife, née Bramwell.

wife's f. fa, Sir Frederick Bramwell, Bart., F.R.S. (1818-1903), eminent engineer; president British Association, 1888; of Institution of Civil Engineers, 1884-5; hon. sec. Royal Institution.—["Who's Who."]
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wife’s fa.; Lord Bramwell (1808-1892), Judge, 1852; Lord Justice, 1876-81; raised to peerage, 1884.—[Dict. N. Biol., Suppl. 1, 256.]

me si son, Sir Joseph Dalton Hooker, G.C.S.I., F.R.S., and pres. R.S., 1872-77 (b. 1817), eminent botanist and traveller; director of the Royal Gardens, Kew, 1855-63; naturalist to H.M.S. Erebus in Antarctic expedition, 1839-43; botanical travels in the Himalaya, 1847-51; Morocco and Atlas in 1871; California and Rocky Mts., 1877; many botanical publications.—[Ency. Brit.,’ 29, 324; ’Who’s Who.”]

me fa, Dawson Turner, F.R.S. (1773-1859), see Palgrave.

fa, Sir William Jackson Hooker, F.R.S. (1785-1864), eminent botanist; director of Kew Gardens, which he greatly extended and threw open to the public, and where he founded the museum of economic botany; was regius professor of botany at Glasgow, 1821, knighted in 1847; many botanical publications.—[Dict. N. Biol.,’ 27, 296.]

me si; the four brothers Palgrave (see Palgrave).

Sir Clements R. Markham, K.C.B., F.R.S. (b. 1830), president for many years of the R. Geog. Society; served in Arctic expedition, 1860-61; travelled in Peru, 1852-4, bringing thence cinchona-bearing trees for cultivation in India; Geographer to the Abyssinian expedition; author and editor of numerous geographical works.—[Ency. Brit.,’ 30, 544; ’Who’s Who.”]

fa fa, William Markham (1765-1823), scholar; secretary to Warren Hastings in India.

fa bro son, Lieut.-General Sir Edwin Markham, K.C.B. (b. 1833), constant active service.—[’Who’s Who.”]

fa bro son, Admiral Sir Albert Markham, K.C.B. (b. 1841), commander of the Alert in Arctic Expedition, 1874-6; various high naval appointments, besides unprofessional work when unemployed on naval duties.—[’Who’s Who.”]
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"Bro. Francis Turner Palgrave (1824-1897), poet and art critic; first class lit. hum. prof. of poetry at Oxford; editor of "Golden Treasury"; author of many critical essays and other publications."—("Dict. N. Blog.," Supp. 3, 242.)

"Bro. W. Gifford Palgrave (1826-1888), traveller and diplomatist; at twenty-six years of age gained first class lit. hum. at Oxford, and second class math.; became Roman Catholic, and travelled as Jesuit missionary in Syria and Arabia, assuming disguise for the purpose. Author of "A Year's Journey through Eastern and Central Arabia." Severed his connection with the Jesuits in 1864, and thenceforward served as English diplomatist in various distant countries."—("Dict. N. Blog.," 43, 109.)


"Me bro, Sir Joseph Dalton Hooker, F.R.S. (see separate genealogy above)."

Sir Henry Enfield Roscoe, F.R.S., Ph.D., LL.D., D.C.L., professor of chemistry Owens College, Manchester, 1857-87; president Society of Chemical Industry, 1881; of Chemical Society, 1882; M.P. for S. division of Manchester, 1885-95; president of Brit. Assoc., 1887; Vice-Chancellor of the University of London, 1866-1902; knighted, 1884; author of many memoirs and works on chemistry.—("Who's Who."

"Fa fa, William Roscoe (1753-1831), historian, poet, and philanthropist; author of "Lives of Lorenzo de' Medici and of Leo X.," and of several volumes of verse; M.P. for Liverpool, 1826-7; promoter and first president of its Royal Institution."—("Dict. N. Blog.," 49, 225.)

"Fa, Henry Roscoe (1820-1870), biographer, including life of his father."—("Dict. N. Blog.," 49, 223.)

"Fa bro, Thomas Roscoe (1791-1873), miscellaneous writer and translator."—("Dict. N. Blog.," 49, 222.)

"Fa bro, William Stanley Roscoe, poet."—("Dict. N. Blog.," 49, 225.)

"Of Some of the Fellows of the Royal Society"

"Fa bro, Robert Roscoe, poet, "King Alfred.,"

"Me, Maria, née Fletcher, artist and authoress, "Life of Victoria Colonna."

"Me si, Harriet Fletcher, authoress of "Tales for Children."

"Fa bro son, William Caldwell Roscoe (1822-59), poet and essayist."—("Dict. N. Blog.," 49, 233.)


"Me si son, Charles Crompton (see p. 9.)

"Me si son, Henry Crompton (see p. 9.)"


"Noteworthy kinsfolks in near degrees, ascending and collateral."

"Fa fa, Sir Henry Strachey (1735-1810), private sec. to Lord Clive in India; joint under-sec. of state for the Home department, 1782; cr. baronet, 1801; F.S.A.—("Dict. N. Blog.," Supp. 3, 364.)

"Fa fa, Lieut.-Gen. Kirkpatrick (1724-1812), orientalist; military sec. to Marquess Wellesley; Resident at Poona;"
translated Persian works, expert in Oriental tongues and in manners, customs and laws of India.—["Dict. N. Blog.," 31, 222.]

FA Edward Strachey (1774-1832), chief examiner of correspondence to the India House, the other two being Peacock and James Mill (secretaries' work; writing despatches, &c.)

FA bro. Sir Henry Strachey, Bart. (1772-1858), distinguished Indian civilian, described by James Mill ("Hist. Brit. India," 6, ch. 6) as "the most intelligent of the Company's servants."


me si. Isabella Barbara Buller, well known in her day as a centre of literary and political society.

BR bro. John Strachey, G.C.S.I., eminent Indian statesman; Lieut.-Governor of the N.W. Province; financial member of Gov. Gen.'s council; Member of Council of India.


BR bro. Sir Edward Strachey, Bart. (d. 1904), author of "Hebrew Politics in the Time of Sargon and Sennacherib."

BR bro. George Strachey (1873-90), Chargé d'Affaires and Minister Resident at Dresden.

BR son. Sir Arthur Strachey (1858-1901) [son of Sir John B. and of Katherine, dau. of George Batten], Chief Justice Allahabad et al., d. ed. 43.

BR son. John St. Loe Strachey (b. 1860) [son of Sir Edward B. and Mary, sister of John Addington Symonds, writer and critic, editor of the Spectator.—["Who's Who."]

me si son. Charles Buller (1806-1848), distinguished politician, sent as secretary with Lord Durham to Canada, 1838, Chief Poor-law Commissioner.—["Dict. N. Blog.," 7, 240.]

me si son. Sir Arthur Buller, Judge of the Supreme Court, Calcutta.

of Some of the Fellows of the Royal Society

Noteworthy kinsfolk in more remote degrees of ancestry.

FA fa bro. John Strachey, Archdeacon of Suffolk, Prebendary of Llandaff, preacher at the Rolls, L.L.D. Camb., F.S.A.


Wife, and her kinsfolk, ascending and collateral.


Wife's fa fa. Sir J. P. Grant (1772-1848), Chief Justice of Supreme Court of Calcutta.—["Dict. N. Blog.," 22, 398.]

Wife's fa, Sir J. P. Grant, G.C.M.G., K.C.B. (1807-1893), Indian and Colonial Governor; Member of Council; Lieut.-Governor of Central Provinces of India; Lieut.-Governor of Bengal; Governor of Jamaica (1866-1873).—["Dict. N. Blog.," Supp. 3, 347.]

Wife's me bro son. Sir Trevor Chichele Padowen, K.C.S.I., Resident at Kashmir, Hyderabad and Baghdad.

Wife's me bro son, Sir Henry Meredith Padowen, Senior Judge of chief court, Punjab (1860-94).—["Who's Who," 1904.]

Descendants.


Son. Oliver Strachey, Econ scholarship.


Da. Joan Perrel Strachey, lecturer on old French at Royal Holloway College.

Da. Marjorie Colville Strachey, prize offered in 1904 by the British Ambassador in Paris to all undergraduates, male and female, of all colleges in Great Britain for examination in French; scholarship Royal Holloway College in 1904.

B. CLAY AND SONS, LTD., BREAD ST. HILL, E.C., AND BURGAY, SUFFOLK.