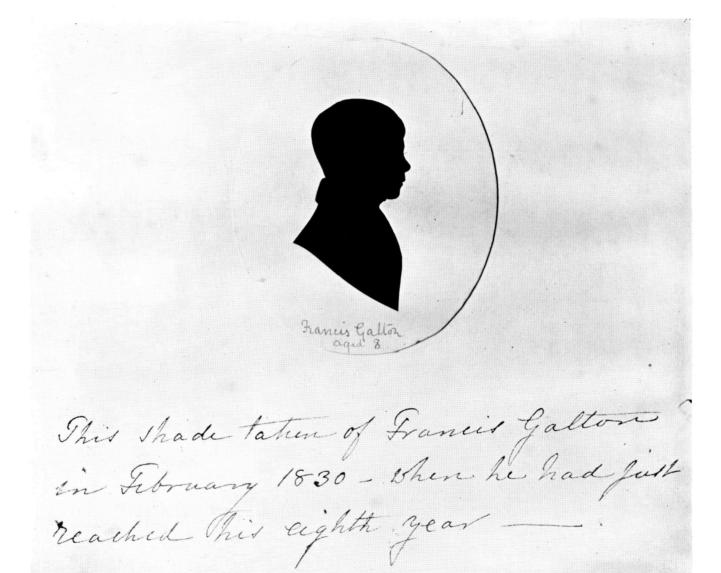
# CHAPTER III

## CHILDHOOD AND BOYHOOD

Francis Galton was born on February 16, 1822, at the Larches, near Sparkbrook, Birmingham. We have already noted the features of that house; how it was built by the botanist, Dr Withering, after the mob had practically destroyed the whole of Priestley's residence, one room only surviving. The site is now marked by a tablet to Priestley; it would be fitting to add to it some commemoration of the relation of the site to another Birmingham worthy, who has been as great a leader of scientific thought.

Writing sixty years after the event a birthday letter to her brother Francis, Emma Galton thus recalls the day itself:

- "My dearest Frank, We shall think of you tomorrow, and wish you and Louisa [Mrs Francis Galton] very many happy returns of the day. What a blessing you have been to us, and how proud we all feel of you. How wonderful a thing memory is! It seems but the other day that Mrs Ryland had called with her 4 horses, and walked in the garden by my mother's garden chair. At Booth [Adèle Galton, Mrs Booth, Francis Galton's aunt] dined at our house, and in the evening you were born about 9 o'clock. And the importance Darwin, Erasmus and myself thought of the Dudson carriage and pompous coachman coming early on the following morning (Sunday) to take us to spend the day at Dudson [Grandfather Samuel Galton's house]. And we worried the servants by every now and then standing on a chair to make us high enough to reach the call-tube in the Library to inform them: 'Mama had a Baby, and it was a Boy!' But we then little realised what a comfort you would be to every one of us. We should have vegetated and had green mould much thicker upon us had it not been for you." [Letter from 5 Bertie Terrace, Leamington, Feb. 15, 1882<sup>2</sup>].
- <sup>1</sup> He was baptised on March 20 following at the Church of St Martin, Birmingham. As we have already noted his father Tertius Galton had left the Society of Friends and received adult baptism in 1816 at Radbourne.
- <sup>2</sup> Another account is given by sister Adèle herself 42 years after the event: "How well do I remember Aunt Booth dining with us on that day and she and my mother coming up in the white room to sit with me that evening; my mother being taken ill at 8 o'clock; Mr Hodgson being sent for and his coming to awake me in the middle of the night to tell me that a 'fine boy' was born. How well can I remember seeing you



Silhouette of Francis Galton in his eighth year, taken from the manuscript life-history of her son by Violetta Galton, 1830.

Francis Gallon Son of Sam - Sertius, & Violetta Galton & Grandson of trasmus Darwin. Sh. D. F.R.J. author of Loonomia, Phytologia, Botanic Garden & e & e & e & was born the 16th February 1822 - He was the youngs Child of the family, having four Justers & two Brothers older than himself. & the goungest of them being six years older Than he was, it is not surprising that from his besth, he should have theited great interest, attention, & affection in the family - His third Tister (Adile born 21 fuly 1810 - being an Imalid to - occasioned by

Sample page of Violetta Galton's Life History of Francis Galton, written by his mother on her son's departure for school at Boulogne, 1830.

Francis was the last child in a family of nine, of which two sisters, Agnes and Violetta, died as infants. The youngest of his four surviving sisters was eleven years older than Francis, and his brothers, Darwin and Erasmus, were respectively eight and six years his seniors, and thus too different in age to be very companionable. Francis had therefore all the temporary disadvantages which arise from being the late and somewhat solitary member of a large family. But these disadvantages often result in permanent advantages, if a child be of marked character. It is thrown on the one hand more on its own resources for amusement, and on the other hand may receive special attention from parents and elders.

"On the 16th February,"—writes Mrs Wheler [Elizabeth Anne Galton] in her Reminiscences,—"my youngest brother Francis was born, he was 6 years younger than the youngest of us and never was a baby more welcomed. He was the pet of us all, and my mother was obliged to hang up her watch, that each sister might nurse the child for a quarter of an hour and then give him up to the next. He was a great amusement to Adéle and as soon as he could sit up, at five or six months old, he always preferred sitting on her couch to be amused by her. She taught him his letters in play and he could point to them all before he could speak. Adéle had a wonderful power of teaching and gaining attention without fatiguing. She taught herself Latin and Greek, that she might teach him. She never made him learn by heart, but made him read his lesson bit by bit, eight times over, when he then could say it. He could repeat much of Scott's Marmion, and understood it well by the time he was five." [MS. Reminiscences.]

For early training and companionship—her room was his nursery—Francis depended largely on this invalid sister Adèle, afterwards Mrs Bunbury. From the couch to which she was confined by weakness of the spine, she directed his early studies, and, whatever might be thought of her methods now, she undoubtedly encouraged both Francis' literary and scientific tastes.

In a little history (see Plates XXXIX and XL) of her son Francis, Violetta Galton gives numerous instances of his literary aptness. Thus at the dame's school to which he went when five years old one of his schoolfellows was writing to his mother at Madeira, as he had just heard that his father was in danger of being shot on account of Don Miguel's usurpation. "What shall I say to my mother about my

next morning, such a red little thing—and how we all loved you, and then how we used to quarrel for the honour of holding you in our arms, etc. But to return to seculars...." (Letter of Adèle Bunbury, Feb. 23, 1864.) Mr Hodgson was sixteen years later the helpful friend who assisted Francis Galton at the start of his medical studies.

father," he asked Francis; "I have said I am very sorry." Francis immediately replied from Walter Scott, "I think this would do:

'And if I live to be a man

My Father's death revenged shall be.'"

"Thank you," said the little boy, and added it to his letter.

And again, in the first year of his going to school at age five, the maid who went to fetch him home found a group of boys teasing him. Francis kept them all at bay with his arm straight out:

"Come one, come all, this rock shall fly, From its firm base, as soon as I."

Another day about this same time his mother took him into a field where the servants were trying to catch some geese. Francis immediately ran amongst them and seizing the old gander by the neck brought him to his mother, muttering to himself the lines of *Chevy Chase*:

"Thou art the most courageous knight
That ever I did see."

On another occasion Francis fell off his pony into a very muddy ditch, and, as he was dragged out by his legs, he sputtered out half-choked with mud to his brother Darwin the lines of *Hudibras*:

"I am not now in Fortune's power He that is down can fall no lower."

As his mother depicts him for us in the first half-dozen years of his life Francis was a boy of mettle, full of strangely assorted knowledge, but naturally rather shy. A pretty story is told in Mrs Wheler's Reminiscences, which brings together two noteworthy English characters. Mrs Fry (see Plate XLVII) was a second cousin of Hudson Gurney, whose wife, Margaret Barclay, was a great-aunt of Francis Galton. Hudson Gurney was himself son of Agatha Barclay, first cousin of Lucy Barclay, Francis Galton's grandmother'. Aunt Gurney's house in St James's Square was the centre from which the young Galtons became acquainted with London life, and here they met Mrs Fry—"a very striking person, tall and dignified and yet so kind and motherly, one felt one could open one's heart at once to her." In 1824 Mrs Fry came to Birmingham and went to stay with

<sup>1</sup> Mrs Fry was also a granddaughter of Catherine Barclay, who was sister to the first Lucy Barclay and to David Barclay of Youngsbury (see Pedigree Plate C). Thus she was second cousin to Tertius Galton.

Grandfather Samuel Galton at Duddeston, where a large party was asked to meet her.

"She told my mother," writes Mrs Wheler, "that she would like to see Francis, then a year and a half old, as her youngest child was about the same age. My mother said she would fetch him, but he was so shy, she feared, he would not make friends with her. Mrs Fry said, 'Oh, never mind, I think he will.' My mother brought him into the room, where seeing so many people he hid his face on his mother's shoulder and would not look up. She sat down by Mrs Fry, who took no notice of him; soon after she took a little box full of comfits out of her pocket, and held it out towards the child but looking the other way, and talking to the company. My mother whispered 'Look, Francis,' and the child seeing no one observed him, sat on my mother's knee looking at the comfits. By and bye, he slid down, seized a comfit and ran back; Mrs Fry took no notice, and he soon stood by her helping himself. She then gently lifted him upon her knee, taking no notice, when he soon began talking to her himself."

His sister Adèle's education, besides providing him with modern English poetry, taught him to appreciate the *Iliad* and *Odyssey*. Leonard Horner, paying a visit to Tertius Galton in 1828, would frequently question the little Francis about points in Homer. At last Francis grew weary of the cross-examination, and one day when the usual questioning began, replied: "Pray, Mr Horner, look at the last line in the twelfth Book of the *Odyssey*," and ran off.

So excited did he grow over the *Iliad*, that as a partizan of the Greeks he was known to burst into tears, when he came to the part where Diomed is wounded by Paris.

Probably apart from poetry his sister Adèle—a child herself—rather forced the pace. He knew his capital letters by 12, and both his alphabets by 18, months of age. He could read a little book Cobwebs to catch Flies when  $2\frac{1}{2}$  years old, and could sign his name before 3 years. I have before me his actual signature on January 10, 1825, as witnessed by his sisters Adèle and Emma. From his fourth year a laconic letter<sup>2</sup> has survived:

- <sup>1</sup> "But why rehearse all this tale? For even yesterday I told it to thee and to thy noble wife in thy house: and it liketh me not twice to tell a plain-told tale." Butcher and Lang's version, p. 206.
- <sup>2</sup> A similar letter to his father, dated Sept. 26, 1826, thanks him for the gift of a toy. There is also a quaint little paper book containing two paper pages stitched in blue paper; the first, second and part of the third side are occupied by two scripture texts written by Francis when four years old, but the remainder of the third and fourth side are filled in the same round hand with the remark: "Papa why do you call my books dirty that come from the Ware-house? I think they are very clean."

"My
dear
Uncle
we have
got Ducks. I know
a Nest. I mean
to make a
Feast."

It is written between pencil lines in a round hand, and there is an endorsement by his mother Violetta, saying that Francis wrote and spelt it entirely himself.

The day before his fifth birthday he wrote a letter to his sister Adèle. The handwriting is now much more formed and the ruled lines have disappeared. He writes:

My DEAR ADÈLE,

I am four years old and I can read any English book. I can say all the Latin Substantives and Adjectives and active verbs besides 52 lines of Latin poetry. I can east up any sum in addition and can multiply by

2, 3, 4, 5, 6, 7, 8, [9], 10, [11].

I can also say the pence table. I read French a little and I know the Clock.

Francis Galton.

February-15-1827.

The only misspelling is in the date, which is corrected as indicated. The number 9 has been carefully erased with a penknife and the number 11 has a small square of paper pasted over it! Little Francis was evidently conscious that he had claimed too much, but as experience showed that penknife erasure tore the thin paper, the pastepot was used to obliterate the second unjustly claimed multiplier!

In a letter written by a visitor to the Larches on December 28, 1828, we read:

"We are both delighted with the girls particularly the two eldest—they are so pleasing and unaffected, and so very amiable. The youngest child Francis is a prodigy. He is 7 next February, and reads and enjoys Marmion, The Lady of the Lake, Cowper's, Pope's and Shakespeare's works for pleasure, and by reading a page twice over, repeats it by heart. He writes a beautiful hand, is in long division, has been twice through the Latin grammar, all taught by Adéle. Bessy and Lucy are very modest girls with a constant habit of being employed."

It is pleasant to catch this impression of an onlooker as to Francis Galton and his relatives written 85 years ago!

When he was in his fifth year his sister Adèle thought it

desirable, as he had no children to play with at home, that he should go to school. He was accordingly placed under the care of a Mrs French who kept a school for 25 little boys about a mile from the Larches. Here Francis distinguished himself from the beginning by being headboy, although there were many several years older than himself. remained at this school for three years, until he was eight years of age, and in the last half-year had daily private instruction from the Rev. Mr Clay, master at the Birmingham Free School. dame at the head of his school reported very highly of little Francis, and once added, "the young Gentleman is always found studying the abstruse sciences." This was probably a protest on his part against the over emphasis of Latin in small boys' education—a matter on which Galton wrote very strongly later (see p. 88). When he left this dame's school at 8½ years of age, he had read and learnt the following books: Eton Latin Grammar, Delectus, Eutropius, Phaedrus' Fables, Ovid's Metamorphoses as far as the Medusa incident, and threequarters of Ovid's Epistles.

His mother, writing indeed of her Benjamin, in 1830, when he was leaving Mrs French's school, says:

- "Francis from his earliest age shewed highly honorable feelings. His temper, although hasty, bore no resentment and his little irritations were soon calmed. His open candid disposition with great good nature and kindness to those boys younger than himself, made him beloved by all his schoolfellows. He was very affectionate and even sentimental in his manners. His activity of body could only be equalled by the activity of his mind. He was a boy never known to be idle. His habit was always to be doing something. He showed no vanity at his superiority over other boys, but pitied them, and said it was a shame their education should have been so neglected."
- The school was at Balsall Heath House, and four communications to Tertius Galton from his son have survived—a rough drawing of a suspension bridge with a ship passing under it, a more tidy drawing of a wooden shed or house, and a neat little painting of decorative sweet peas, and lastly a dated letter, June 1st, 1830, stating that the holidays would commence on the 19th, that he thought he had much improved in his Latin and Greek with Mr Clay: "I shall soon be in Greek Delectus and Sense verses, for you know that I have nearly done with Nonsense verses."
- <sup>2</sup> His mother once said to him at a somewhat later age: "Francis, how can you keep your temper as you do?" "I don't," he answered, "but I've found out a capital plan. I go to my room as soon as I can get away, and I beat and kick my pillow till I'm tired out, and by the time I've finished, my temper's all gone." He continued metaphorically "to beat his pillow" under great provocations in later life.
- <sup>3</sup> This is aptly illustrated by his great concern on going to Mrs French's because he thought that his mother would not let him remain at that school—the boys were so commonplace they had never heard of the *Iliad* or *Marmion*!

  9—2

Such testimony from a mother might mean little had it been written when her son had reached distinction. But Violetta Galton appears to have written only thus of one son, and of him only before he was nine years of age. Did she see in her youngest son something of her father, or did her acquaintance with many men of marked intellectual ability enable her early to appreciate nascent signs of remarkable power?

It must not be thought that Adèle's scheme of education had not a modern side. Seeing how fond Francis was of natural history, she taught him a good deal of entomology, a study he became particularly fond of; and soon the boy's perseverance and activity in collecting insects were noteworthy. He was also fond of studying the history of birds. Geology he was deeply interested in, and when he went with his mother on his second visit to Ramsgate in 1829, "he would entreat her to let the post-boy stop whenever he saw granite, or chalk or any mineral showing itself in the hills."

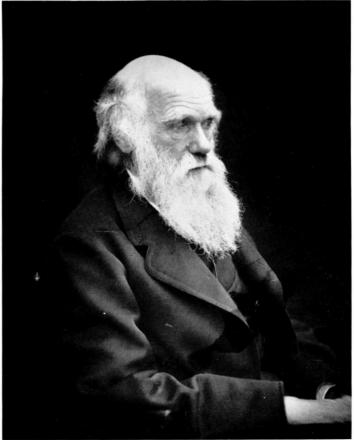
Some idea of Francis' pursuits and interests can be found in a will he made, boy fashion, some few months before his departure to a school at Boulogne. It runs:

I, Francis Galton of the Larches near Birmingham make this my last Will and Testament—I give to my dearest sister Adèle for her great kindness in teaching me all my English Books, my Watch, and all my Compound Money and Collection of Beetles—

<sup>1</sup> It is interesting to find in this very year when Adèle was teaching Francis entomology a notice in the records before me of Charles Darwin. Mrs Wheler writes: "In September (1828) Lucy and I were invited to Osmaston for the Derby Music Meeting, but when the time came Lucy had one of her rheumatic attacks, and Emma went in her place. Catherine Darwin came to us from Shrewsbury and we travelled together. Charles Darwin joined us at Osmaston, and we were a merry party of cousins....William Fox was making a collection of butterflies, and Charles Darwin immediately began to do the same, and this was the beginning of his interest in collecting. He and William Fox struck up a friendship which continued all their lives." MS. Reminiscences, p. 113. Mrs Fox was the daughter of William Alvey Darwin, a brother of Erasmus Darwin. Charles Darwin was at this time 19 years of age, and in his Autobiography he tells us that his passion for collecting had been developed before 1817 (Life and Letters, 1, p. 27). At that time Darwin was leaving Edinburgh and just going up to Cambridge, and he was already familiar with many men studying natural science. On the other hand Mrs Wheler's incident confirms what Darwin himself tells us (l.c. p. 51): "I was introduced to entomology by my second cousin W. Darwin Fox, a clever and most pleasant man, who was then at Christ's College and with whom I became extremely familiar."



CHARLES DARWIN (1809—1882). In early manhood. From a print in Mrs Wheler's MS. "The Galton Family."



CHARLES DARWIN (1809—1882). In later life. From a photograph by his son Major Leonard Darwin.



ERASMUS GALTON (1815—1909).

In his uniform as a "middy," aged 13. Elder brother of Francis Galton. See Galton's Memories, p. 16. Silhouette in the possession of Mr Wheler Galton at Claverdon.

To Bessy, my Minerals and Shells—To Lucy my Hygrometer and Desk—To Emma my Medals—To Darwin all my parchment and my share in Aab and Poss [? ponies]—To Erasmus my Bow, Arrows and Steel Pens—To Edward Levett Darwin¹ [his cousin, son of Sir Francis Darwin] my Skates and latin and greek Books—I make my dearest sister Adèle my Executrix.

Signed, sealed and delivered by the within named Francis Galton on the 14th day of February One thousand eight hundred and thirty

Witness S. TERTIUS GALTON VIOLETTA GALTON.

Francis Galton himself feared that the educational efforts of his sister Adèle might have had a disastrous influence:

"In middle life," he writes in his *Memories*, p. 14, "I feared that I had been an intolerable prig, and cross-questioned many old family friends about it, but was invariably assured that I was not at all a prig but seemed to 'spout' for pure enjoyment and without any affectation; that I often quoted very aptly on the spur of the moment, and that I was a nice little child."

As a rule the presence of elder brothers and sisters, ready to do a little hustling and teasing when occasion requires, suffices in most cases to check any priggishness in the youngest member of a family. But there is another point from which the matter may be judged. Galton suffered in later years from occasional mental weariness, the effect of over-strain, and there is just a sad note in an answer his mother has preserved for us, given to his father who had been examining him in arithmetic when he was five years of age. Asked if he was not tired, he replied: "I am not tired of the thing, but of myself." It is possible that with an ambitious, mentally active boy<sup>2</sup>, such as Galton undoubtedly was—a boy who was easily ahead of his compeers in his first two schools—a little holding back would have been the more judicious course. There is a plaintive note too, with perhaps a deeper meaning

<sup>&</sup>lt;sup>1</sup> Edward Darwin went to school with Francis at Mrs French's.

<sup>&</sup>lt;sup>2</sup> When four years old Francis was observed to be very careful of every penny that he received, and upon being questioned what he was saving for replied: "Why, to buy honours at the University." He once also told his father on being asked what he would like most: "Why, University honours to be sure." The influence at work is not clear, the Galtons themselves did not spring from academically minded stack, and the University careers of his uncles Charles and Robert Waring Darwin were of the distant past. His cousin Charles had not yet gone to Cambridge.

in the phrase he used to mutter, at four years old, when his sister called him to lessons:

"Oh stay thee, my Adela stay, She beckons and I must pursue."

Still there is another side to the picture, and we note that at three years and a quarter the small Francis was able to trot, canter, and gallop upon a large Galloway. The Galtons certainly encouraged outdoor sports and exercises.

In 1830 a great change came over Francis' life. Although only eight and a half years old his father determined to send him to a large boarding school at Boulogne kept by a Mr Bury. It is difficult to appreciate now-a-days the motives which induced parents—in an age when the child death-rate was appalling even in the upper middle classes—to place quite young children in distant boarding schools. Francis Galton himself (Memories, p. 16) suggests that he was sent to Mr Bury's to acquire a good French accent. "What I did learn was the detestable and limited patois that my eighty schoolfellows were compelled to speak under the penalty of a fine," and the final judgment he gives on this school with its apparently poor feeding, frequent birchings and bad supervision runs as follows: "The school was hateful to me in many ways, and loveable in none, so I was heartily glad to be taken away from it in 1832."

Violetta Galton in her little record endeavours to assure herself of the happiness of Francis. He had left home on September 3, 1830 with his father; they had slept in London that night, and they had visited St Paul's and its dome next day. At 11 o'clock they embarked on the "Lord Melville" steamer for Calais, where they arrived late at night. The next day they went by "The Telegraph" to Boulogne, and in the evening, after seeing the sights, his father left him at the school in the old Convent, close to what is now the Cathedral. Tertius Galton waited a week in Boulogne

"to assure himself of the dear child's perfect happiness. He did not shed a tear, or seem at all uncomfortable at parting with his father, but to the last repeated how happy and comfortable he was, and how kind Mrs Neive, the housekeeper, and everybody was to him."

So Violetta Galton tried to console herself, but she sat down and wrote the little record of her son which has been preserved to this day, and she placed at the front the silhouette, which I have reproduced—

the earliest portrait of Francis Galton. Before her also she doubtless had two of the three little packets which lie on my table as I write this: the first is entitled, "Baby's Hair," a fine golden shade, the second "Baby's Hair, Fras. Galton" was preserved by his sister Emma Sophia, and is of a paler shade and probably earlier, and the last "Francis' Hair, 1829 (?)," a bright light brown, must represent him much as he was in Boulogne.

At the school he was placed in a high class, although the boys' ages ranged to fifteen. A collection of eight letters written from Boulogne were copied into a notebook by his sister Adèle, and the originals of five of them have also been preserved. These letters are boyish letters, referring to the animals at home, his garden patch, the doings of his sisters and brothers, and of his grandfather at Duddeston. The letters are probably not quite characteristic, for I shrewdly suspect they were supervised by the master, who occasionally adds a footnote of his own, and in one case cross-writes a good deal of the note. Most of the letters begin with a statement that Francis is very happy at the school, but in later life Galton always spoke of his unhappiness there, and the reiterated statements of happiness and the kindness of the other boys do not seem spontaneous. Here are samples of these boyish letters:

Boulogne sur Mer, Saturday, 30th Oct., 1830.

MY DEAR ADÈLE,

I am very happy at School. The Boys are all pretty kind to me. I am growing very tall, and in better proportion, for I am just able to clasp my wrist. I am invited out every Sunday which I like very much. I was put in the third class a little while ago, because I was not able to keep up with them in lessons. I am reading a French book called Robinson, for I have just got out of the Grammar. I do Florilegium which I think is very hard in some places for they are taken out of the end of the Delectus, but some are very easy. I have not begun to learn either fencing or dancing—but I think I soon shall begin. Tell Emma to take great care of my garden, and to see that none of the sisters take any of my Hollyocks up, else I shall be in a most terrible rage when I come home. I like Cowper's Poems very much for there is at the end a very entertaining account of some Hares. I hope that the Pigs, Dogs, Horses and Cows are quite well. Please don't feed Ringwood so much if you think it will make him a bad Dog. Give my best love to Papa and Mama, Sisters, and to Grandpapa and Aunt Sophia,

And believe me always,

Your most affectionate Brother, Francis Galton. A month later Francis writes:

Boulogne sur Mer, Nov. 30, 1830.

MY DEAR MAMMA,

Thank you for your nice letters, but in your last letter you have no need to praise me for mine, for I had put nothing in it hardly, for I had but a quarter of an hour to write it in. When I said I was put in Robinson, I meant Robinson Crusoe, which I like pretty well. I hope you will come over soon here for I should like to see you, and to go out with you, for I miss dear Papa's greengages, which he used to give me when he was here......Tell Papa to bring at least two bottles of caustic, for what you will hardly believe when I tell you that I have one hundred and forty-two little warts. Unfortunately I have had a cold which kept me from going out yesterday, and even I am now in the sick-room whilst I am writing this letter. I have been ill once before, last Saturday I could hardly speak, and yesterday which was a going out Sunday, I was kept in bed all day. I am getting on with my Latin pretty well, but now I must end my letter for its getting very dark. Good bye and believe me always

Your most affectionate son,

FRANCIS GALTON.

In the next letter, we learn that little Frank, as he was called at home, had spent his Christmas vacation as he did the following Easter holidays at Boulogne. Nor had there been a parental visit. After the usual phrases about liking the school and the kindness of the boys, and spending the holidays very happily, Frank continues:

"Please to tell Emma and Bessy to take the greatest care of my carnations, and other flowers, for when I come home, I shall expect to see about twenty roots—and please take up all the weeds that you can.....All my warts are gone off—except one that is remaining. Thank you for saying that you would keep a bit of caustic. My flannel drawers and waistcoats are very comfortable. I am very glad that you have left off being a Banker<sup>1</sup>, for you will have more time to yourself and better health. I must now leave off, so good bye, and believe me

Always your affectionate Son,

FRANCIS GALTON."

The next letter preserved follows the Easter holidays, and Francis thanks his father for buying five shillings' worth of flower seeds for his garden. He notes also that it now will not be more than three months to the Midsummer holidays—when the precious garden and all the domestic pets from dogs to Alderney cows would again be actualities.

<sup>1</sup> The Galton Bank was closed on May 31, 1831, and Tertius Galton removed at the end of this year from Birmingham to Leamington.

Frank returned home on June 30, and had only a clear day at home. On July 2 he went to the Colonnade House, Worthing, for the holidays. On August 31, Tertius Galton took his son up to London to join Mr Bury for Boulogne.

In a letter three weeks later (Sept. 20, 1831) Francis announces his safe return to his mother. After the usual phrases as to the happy character of the school. Francis continues:

"I arrived here very safely. It was very calm indeed I think, but all the other people thought quite the contrary. There was a very fine Newfoundland Dog, but he was very tame indeed. Almost all the women were seasick. I lost my Berth, but even if I had not, I would not have slept in it. When I was asleep we past the Hector (the ship in which Captain Parry sailed to the northern regions), but when I awoke I found myself just opposite Gravesend. There were many Brigs and Frigates. One of them fired two guns, which I suppose was a salute. I did not see Sheerness, nor any three-deckers anywhere up the Thames. We past the Wellesley and the other ships at the Downs....."

The boy of nine was developing into a good traveller. The last letter but one of the Boulogne series may be given in full:

11th November, Boulogne, 1831.

#### MY DEAR MAMA,

Please will you send the desk1 which you gave me, by somebody that comes over here, or in anyway that you can, furnished well with wafers, sealing-wax, a gimblet (for mine is broken), a turn-screw, good paper like that which you write on to Erasmus and a little packet containing about twenty nails, and the same number of screws, with a file. All the wire is come off that chain which Adèle bought me, so I am obliged to tie my keys to the buttonhole of my jacket by a piece of string. I have got the key of my playbox, which I quite forgot to tell you in my last letter. My Greek Lexicons have not become of great use to me, but I think they will soon, but I am always wanting my Classical Dictionary when I do my Virgil. I am quite well and I hope that you are also. I get better notes a great deal than I did last half-year, and am much happier. One of the Masters saw my candle in my desk which I brought last half, and he slyly took it away and put it on his desk, intending as I thought to keep it, but as soon as he was gone to the other end of the room, I sneaked it up and took it away and put it in my cap, -but alas! he found it out, and I do not think I shall get it again; so please add a Taper to the various articles and a pretty seal. Desks are so much in fashion this half, that there is hardly any big Boy that has not one. Send a quantity of pounded gum arabic, as I cannot manage to get it here. Send in my desk

<sup>&</sup>lt;sup>1</sup> In the following letter he writes: "I am so desirous of having my desk, that I am making a very nice place to put it in, where no Boy can get, and I am always thinking of it."

with the other articles a great quantity of impressions of different seals, for a great many Boys are always asking me to give them the seals of my letters (as I have the most) for gum seals, which indeed are very pretty. I quite long to see my gallant desk arrive. Edward Fisher is not come to school. Schonswar is very kind to me, and he always gives me wafers when I want them, but now in the Even<sup>s</sup> we are not allowed to stir from our places, and in the morning he is doing French.

So good bye, and believe me,

Your affectionate Son.

FRANCIS GALTON.

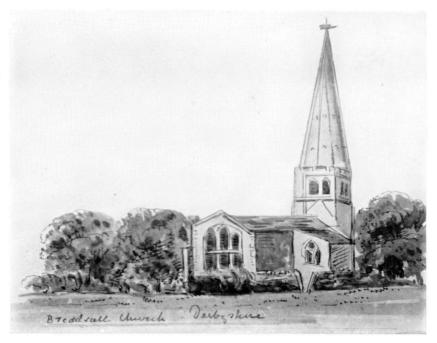
The last letter undated is written two weeks before the Christmas holidays, again to be spent away from home. Clearly Frank had heard of the coming change to Leamington. "I wish very much indeed"—he writes to his father—"just to go to Birmingham again and to see the Larches and Dudson-and other parts of Birmingham again." In the following year, when Frank came home for his holidays in June, he left Boulogne for good. But besides the change of home to Learnington, other marked changes occurred for the Galtons in 1832. Towards the end of January Grandmother Darwin—Elizabeth Collier —became ill and died on the fifth of February. She had always been a marked feature of the Galton circle. The visits to Breadsall Priory (see Plates XLIII and XLIV) were frequent, and Grandmother Darwin's visits to Birmingham were much appreciated; thus her death was a source of great sorrow to her grandchildren. She had had 12 children, 41 grandchildren and 28 great-grandchildren and at her death 60 descendants survived her. On the 10th of June of the same year Grandfather Galton also died; he was buried in the Quaker ground at Bull Street. Thus the visits to Duddeston, made by the grandchildren hitherto two or three times a week, came to an end, and the influential Quaker element<sup>2</sup> disappeared from their lives. With the death of his father Samuel, Tertius Galton—already a fairly wealthy man—became more so, and the future independence of the members of his family It was largely the wealth acquired by his grandfather Samuel Galton the second, that freed Francis Galton from any necessity

<sup>&</sup>lt;sup>1</sup> Francis with his father, mother and sisters had had a very happy visit there in 1827. One evening they got up a country dance, their grandmother Elizabeth Collier—then in her 80th year—joined in and heartily enjoyed it.

<sup>&</sup>lt;sup>2</sup> The influences were of an intellectual kind also. The drawing room and dining room at Duddeston were large rooms, three sides of the latter and part of the former were lined with books of history, botany, natural history, poetry, etc., and the grand-children had the advantage of being allowed to borrow any book they liked.



The later home of Erasmus Darwin and afterwards of his widow (Elizabeth Collier, Mrs Pole). This is the house where the joyous visits of the young Galtons to their grandmother were made. From a pen and ink sketch of the garden front. BREADSALL PRIORY ("Happiness Hall").



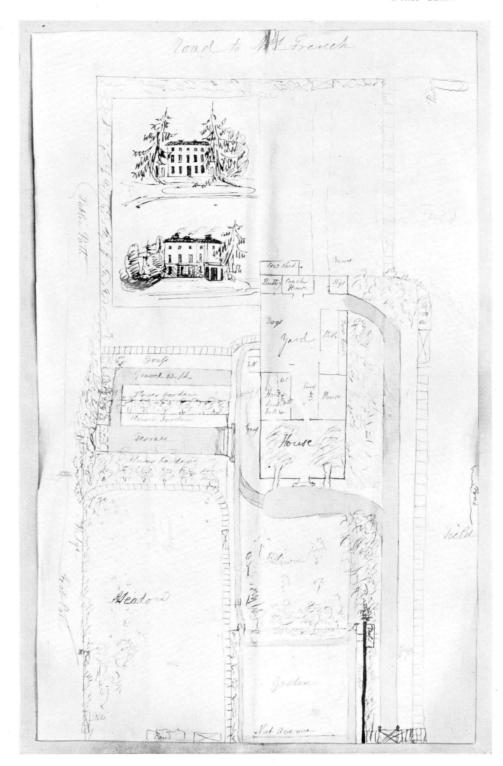
BREADSALL CHURCH.

From a sketch. This Church contains the tombs of Erasmus Darwin and his widow (Elizabeth Collier) with those of other members of the Darwin family.



BREADSALL PRIORY.

Purchased by Erasmus Darwin the Younger, afterwards occupied by Erasmus Darwin the Elder, and later by his widow. From a water-colour sketch at Claverdon.



Plan of The Larches, the birthplace and home of Francis Galton's boyhood, with two inset aspects of the house. From a plan by Violetta Galton (née Darwin). We see the road to Mrs French's school and the meadows where Charles Darwin rode and shot with the Galton boys.

for following a profession, and knowing Samuel Galton's character as we do' we may feel confident he would have approved his grandson's final disposition of a large portion of it.

With his return from Boulogne the first period of Francis Galton's life closes; his childhood is over and his boyhood begins. The letters we have quoted from these early years may appear to the reader to contain little of note. They are indeed just what a healthy normal child would write, but it is that very fact that makes them essentially human documents and gives them their fundamental interest. We rejoice to see that men who have laid their mark on their age are in constitution just such human beings as we ourselves and closely akin to the childworld with which we are all so familiar. Need we attempt to see signs of exceptional ability or to discover foreshadowings of future achievement in the outpourings of healthy childhood? I do not think we can say more than that Francis Galton was a normal child with rather more than average ability, and that possibly only his mother, Violetta, realised instinctively that he was not just like the rest of her children.

From plans and sketches of the Larches drawn by Violetta Galton and her daughters Bessy and Emma we are able to realise the home of Francis Galton's childhood, which appeared to him so delightful, not only from the distance of Boulogne, but from the distance of The house was a spacious one three storied in front and later life. five-windowed across, two tall larches' overtopping the roof stood as sentinels right and left. Two wings went out from the rear, that on the left faced a garden with terrace leading to a summer This wing had a bay window, and made the house on this side also three storied and five-windowed across. The right-hand wing ran back to the stable and brewhouse, which had once been Priestley's laboratory. At the back of the house was a large yard terminating in poultry-, coach-, and pig-houses, with cow sheds leading directly to the fields, where the boys used to scamper about on their ponies. We see the very spot where "Ringwood" and his fellows were kept, and the . archery ground, and wonder which out of the many flower borders was the patch tended by Frank, where his beloved hollyhocks and

<sup>&</sup>lt;sup>1</sup> See pp. 43—48.

<sup>&</sup>lt;sup>2</sup> Mrs Wheler in her *Reminiscences* says these trees were among the first larches brought to England.

carnations flourished. Undoubtedly it was a spacious, pleasant home and one round which many childish memories would grow up still more spaciously and pleasantly (see Plate XLV).

It is in the essence of childhood to have but one real 'home' and we may question whether Galton ever felt to 44 Lansdowne Place, Leamington, as he felt towards the Larches.

Francis, as we have seen, came back at the end of June to England, and on July 11 following, a month after his grandfather's death, we find him on what was probably a last visit to Duddeston:

MY DEAR PAPA,

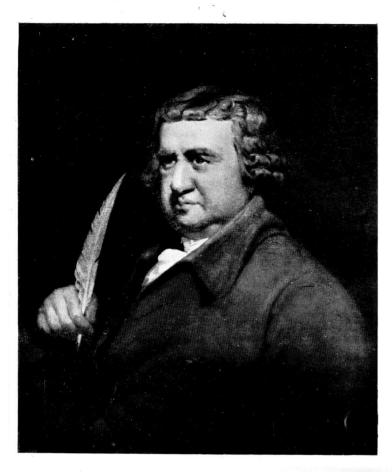
Last night I caught four perch and this morning I had much better luck for I caught in about the same time three perch and four roach. When I was coming to Nole a carriage arrived just before in which was a Lord; as the servants were handing his wife out all of a sudden she fell on the pavement and was hurt very much indeed. I and Adèle made a very good dinner on the biscuits which I brought with me. Good bye. Aunt Sophia sends her best love to all.

F.

Were the birds (see p. 41) still on the lake as Francis caught his fish? Francis' reputation as a fisherman seems to have been a family joke, and two years later provoked a retort in sketch caricatures of a shooting expedition of his brother Darwin (see Plate XLVI).

"Dear Dar, so I hear that no horses were strained to death in carrying your game, but however I send you some caricatures below."

The sketches are somewhat crude, giving little sense of Francis Galton's later power with his pencil. They open with Darwin giving instructions to Ben to provide a waggon with four strong horses to bring the game home, then we see Darwin in a gig with keeper and guns and three dogs. Thirdly comes the death of one dog, and the partridges' mocking flight, "Hee, Hee, Hee!" Fourthly the arrival of the waggon and waggoner "I have brought the waggon and four stout horses." "Why I have only been able to kill my dog," says Darwin; "however buy 1 hare and 6 brace of partridges and put them in the cart." The last picture represents the return of the sportsman to the family circle: "Well, what news?" says Mamma. "Why, I couldn't kill anything but the dog, it must have been the fault of my gun; but at the end I murdered 6 brace and 1 hare." Chorus: "Hum, bad Carpenters always complain of their Tools." Papa: "Who was it I saw buying partridges for one Darwin Galton?"



ERASMUS DARWIN (1731—1802), Grandfather of Charles Darwin and Francis Galton. From a painting by Wright of Derby.

DARWIN GALTON (1814—1903). Eldest brother of Francis Galton as sportsman. From a picture by Oakley at Claverdon. See p. 75.



"You see it is now tit for tat, the birds are not more afraid of you than the fish are of me. Hope Delly' is well, give my love to all. Good bye.

F. GALTON2."

After the home was transferred to Leamington, Francis was sent to school at the Rev. Mr Atwood's, who was Vicar of Kenilworth. This was a small private school with about half a dozen boys. Atwood was a relative of the inventor of Atwood's machine, a man who, to quote Galton's own words, "without any pretence of learning, showed so much sympathy with boyish tastes and aspirations that I began to develop freely."

At this school Galton came in touch with the two Boulton boys, Mathew P. Watt and Hugh William, grandson of Boulton of the Lunar Society and the close friend of Samuel Galton, Wedgwood and Erasmus Darwin. Mathew Boulton became an intimate friend of Francis Galton, and one of the inspiring influences of his life. At Atwood's school carpentry and turning appealed to Francis' special and boyish instincts. Bird trapping, slings, archery, cricket helped to fill up the time. But he had got even beyond this, the summer holidays had been spent at Aberystwith and he had shot with a gun for the first time.

Half a dozen Kenilworth letters have survived. The first shows us that Mr Atwood did not fail to mingle a spice of theology with his other teachings:

December 30, 1832.

MY DEAREST PAPA,

It is now my pleasure to disclose the most ardent wishes of my heart which are to extract out of my boundless wealth in compound<sup>5</sup>, money sufficient to make this addition to my unequalled Library

The Hebrew commonwe alth by John
A Pastor advice
Hornne's commentaries on the Psalms
Paley's evidence on Christianity
Jones' Biblical Cyclopoedia

9 2	
4	6
2 10	
27	6

## All books much approved of.

<sup>1</sup> Adèle.

<sup>&</sup>lt;sup>2</sup> Letter to Darwin Galton, Sept. 8, 1835.

<sup>&</sup>lt;sup>3</sup> Memories, p. 19.

<sup>4</sup> l.c., p. 20.

<sup>&</sup>lt;sup>6</sup> This and the reference in the Will, p. 68, suggest that Tertius Galton had put by certain monies for Francis at compound interest.

Francis' spelling and writing do not improve, and this confirms my view of much supervision at Boulogne; but all things become freer and more natural. On February 7, 1833, Francis writes:

DEAREST PATER,

I wish you would send me as soon as possible three boards just like those which you gave me to carpenter upon on for very particular circumstances and send them as quick as possible. I intend to direct the letter to Adèle for fear if Pater should not be at home you may keep it for him the directions for the size are about 1 inch in thickness and a foot in breadth F. G.

[Miss A. Galton, No. 44 Lansdowne Place, Learnington.]

When capitals and all stops disappear that boy is full of his own ideas and supremely happy! The Boulogne statements as to "happiness" have wholly vanished, and Francis is really happy. Again:

MY DEAREST FATHER,

I have enclosed this note to Mrs Yard (?) as you desired me and I also hope that you will put its direction on it as I do not know it. Please ask Dely to send one rat of those steel iron traps like the one in which you caught your fingers with teeth and tell her I will discharge the immense sum of 1°, 3° at the Easter Holidays.

FRANCIS GALTON.

And again:

MY DEAREST PATER,

Please would you let me stay here till next Tuesday because I think that I could [learn a] deal more at [? from] Mr Churchill than otherwise for he teaches famously. I have no more time to write so Good bye,

Francis Galton,
alius
Snog, Lord Torment
and
Tease.

When a boy asks to stay longer when the Christmas holidays are arriving in order presumably that he may "learn a deal more" all must be well with him! Who Mr Churchill may have been, I don't know, but no man ever received a higher testimonial to his teaching.

The Christmas holidays of 1833 had been memorable in the Galton annals. An attempted robbery was made at Lansdowne Place, only to be consummated some weeks later. Francis Galton gave an account of the event 65 years afterwards:

<sup>1</sup> Possibly a teacher of chemistry, for according to another memorandum Francis began to study chemistry at this time, but the teacher is said to be French.

"I was at home during the Christmas Holidays when an attic was my bedroom. Awaking one morning before daylight, when a faint light came from the street lamps, I saw vaguely, the dark form of a man, standing by my bedside, but saw very clearly the white blurs made by his face and hands, for he was on the side opposite the window. Still it was impossible to be sure of the reality. I was but a small boy, in so great a terror that my tongue refused to articulate properly, when I tried to speak. Then with a great effort, I sprang out of bed and pushed at the figure. My hand came against the body of a man. Forthwith I pulled the bedclothes over my head, expecting every moment to be stabbed through the counterpane. Thus I lay in agony until the day broke and light coming through the clothes made it seem safe to look out. When I told my story at breakfast, I was laughed to scorn, they said it was a nightmare, but I knew better1. The robbery took place a few days later, when I had returned to school and the attic was empty. The thieves gained access through that room, entering through the window from the roof and leaving the dirty marks of the slippers they wore all about the floor. The servants then said that similar marks but fewer of them, had been seen the morning after my adventure. My conclusion was that the man by my bedside, was a reality and no dream, and that he had entered, it might be merely to prospect the premises, believing that the attic was vacant, more probably that he came with the intention of making the theft, but finding the attic occupied and fearing an alarm, he decamped, to return on another occasion, when assured that the occupant of the room was gone. He doubtless heard through an accomplice servant that no credit had been given to my tale.

Francis Galton, Sept. 2, 1898."

In this robbery at Lansdowne Place Francis lost his watch<sup>2</sup>, and the accompanying letter received March 1, 1834, reminds his mother that a year has sped without a new watch.

MY DEAREST MATER,

I now write this letter to you on particular business to remind you of something which although you may have forgotten is still as fresh as possible in my memory which is that a few days after the robbery (the day of which was yesterday) you did, for the purpose of solacing and comforting me on account of the watch, faithfully promise that if that said article was not discovered another exactly similar to that

An almost identical incident occurred to the present writer as a child of nine, except that the man—lunatic or sleepwalker—was seated on the edge of the bed and visible in the moonlight that fell on him from the open window. I recollect keenly to this day, the effort to test the reality and the solidity of the man, then the hours of torture under the bed-clothes, to be told it was a nightmare, but I too knew better, though no demonstration of its reality ever came to justify me!

<sup>2</sup> In the police advertisement: £50 Reward, Robbery of Jewels etc., February 23, 1833, we read among other things: "a small silver French Hunting Watch, supposed to have F. G. engraved upon the Back." It is probable that this watch was a present from Francis' grandfather Samuel, from whom a nice letter is still extant to his son Tertius; this letter covered a draft to purchase watches for the grandchildren.

should fill up my watch-pocket and as the aforesaid article has not been found in the hands of anybody I do assuredly hope and expect that the next time my foot shall cross the threshold of No. 44 a silver watch shall be given into the hands of me. Herein fail not.

I have been going on with my chemistry very hard and please give a thousand thanks to  $\pi\alpha\tau\eta\rho$  for Turner since it is of a deal of use to me. As the sole import of this letter is to remind you, mammy, of the watch I have nothing else to say so good bye

Tut Squagde.

One more letter, written to his sister just before the summer vacation to be spent at Weymouth, and the happy days at Kenilworth come to an end.

[Before June 12, 1834.]

#### MY DEAR ADELE.

I think that when you write to me you might possibly remember to put where you live for the letter that you last sent to me had not the direction in it so that when I come to Weymouth I shall not know where to go unless you write. (Please don't read the following loud but let it be secret. Coax Pater as much as you can to get me a gun and ask him when he is not at all in a black humour and I leave the rest of it to yourself.) I hope that Poddy has quite recovered her fright and is much better and I wish I had been there to enjoy the fun. I wish that you had not gone to Weymouth for you said in your last letter that it was a large place which makes it as bad as even Brighton. Try and get a great many eggs of rare sorts but not of the common for I have a great many of them and cover them with rather weak gum and water instead of blowing them and try and learn their names. I am coming on the 19th and are there many places for fishing Atwood is gone out for three days and Hugh Williams goes on the 12th. Good bye and remember what I asked you.

FRANK GALTON.

Fishing, birds'-nesting, possibly I fear shooting sea-birds, such were the occupations of Frank's summer holiday. Soon after his return home a new school was found for him. Tertius Galton retained the Quaker dislike of public school education and he still held to the Birmingham tradition. Had the former been based on the perception that a classical education was idle for Frank, it had been justified, but he sent him into the centre of a big town—to obtain a suitable education as its justification? No! to obtain precisely the classical drilling which at least he would have obtained under healthier environment in several public schools. It is remarkable to look now on the

<sup>1</sup> I think this must refer to the following incident: Mr Galton had purchased horses for his daughters to ride, and when two of them were out passing the barracks, the druins began to beat, and one of the steeds bolted with its mistress into the barrack yard and took its place at the head of the regiment—it was an old troop-horse.

11

intellectual activity of Birmingham, on Priestley, Watt, Boulton, Samuel Galton, and their association with the Wedgwoods and Darwins, and realise that no attempt was made to free Birmingham from the trammels of mediaeval education. Samuel the first had indeed sent his son to Warrington Academy to study under Priestley and Enfield, but the younger generation, the sons and grandsons of the men, who had made Birmingham and their great fortunes out of Birmingham, fell back into the old theological and educational ruts. It is one of the most interesting chapters in the life of Francis Galton to read on the one hand the letters of Dr Jeune, headmaster of King Edward's School, Birmingham', then called the Free School, to Tertius Galton, and compare his views on education with those of his pupil Francis Galton, a boy in his teens! Galton lived in Dr Jeune's house at Edgbaston, and walked daily through a mile of streets to school and back. He started with ill luck, for some weeks after going on Jan. 26, 1835 to the school, he was invalided home and the attack proved to be one of scarlet fever. Francis had been in the doctor's hands in the previous Christmas vacation and was possibly specially receptive, and the attack undoubtedly left him languid and inert. The epidemic was a severe one, for the headmaster wrote that he felt convinced by his late fatal experience that however disguised it might be by other symptoms it would turn out as in every recent instance an attack of scarlet fever. "It is a subject of congratulation rather than of regret that he should have undergone the trial, as the complaint I understand never returns." Little Johnny Booth, stepson of Galton's aunt, Adèle Booth, who had been at Boulogne with him, and then gone to the Free School died from the fever. The life of another boarder was despaired of for some days. We have indeed to remember that we are back in the days when healthy children were put to bed with one that had the measles, in order that they might "get through them." When Francis got back after Easter, he was far behind his classmates and he was removed from the second into the third class at his own desire. Probably he never properly recovered from this

P. G.

¹ Dr Jeune afterwards became successively Dean of Jersey, Master of Pembroke College, Oxford, and Bishop of Peterborough. He was a man of distinction and had a distinguished son. He was only 28 when he went to Birmingham, and he remained there from 1834 to 1838 just the time of Galton's career in the school. At Oxford he was a reformer, and, perhaps, his experience at Birmingham was of value to him later.

throw-back in his school work. Writing before the attack to his father on February 2, 1835, for his foils, he appears fairly cheerful:

"I am very happy here, and we have everything almost we could wish. We do an immense deal of work but nevertheless I should like to fence as we should have quite 3 quarters of an hour to ourselves after fencing for an hour on half-holidays. All this week there have been only two boys caned and none flogged they are in such capital order, but the rules are pretty strickt [sie!] and the Doctor does not allow us to make a mistake in our Grammar."

But this tone of commendation very soon ceased. Of the rest of this year we have no further records in letters, but we know that the summer vacation was spent at Castle House, Aberystwith—the second visit to that place; that the mode was shooting—in which sea-gulls and water wagtails met their fate. Here too Dr Jeune was invited to come for a few days' change—not wholly to the satisfaction of Francis—and the family learnt how a very clever man may be ignorant of every-day customs.

One day in July the family was alarmed by hearing that a mad bull had got loose and was tearing round the town. He had tossed a small man onto the top of a fish-stall.

"We all went out in front of our house, which was enclosed and so quite safe, to watch. Just under our wall was a flight of six or eight steps, and some children were seated on them. The bull rushed by, clearing the whole steps, children and all, without hurting them, and rushed towards the sea, the men following him with pitchforks only made him worse, and he darted into the sea and swam away. The butcher not wishing to lose him got a boat and rowed after him. The poor beast thoroughly tired, allowed them to put a rope round him and tow him back, when he dropped down on the sands unable to stir. The butcher went to get something to put an end to him, when, on his return, the bull jumped up and charged him. Away scampered the man and it was some time before the bull was caught, I think he was shot at last for no one dared go near him. Francis drew a caricature of 'All the Taffies put to flight by one John Bull,' and showed it to our Welsh cook, who was very angry with him. She had offended him by throwing away some rooks he had shot, instead of making them into a rook-pie, so he had taken this means of punishing her" (Mrs Wheler's Reminiscences, p. 192).

Returning home Darwin drove Francis back in a "dogcart outrigger." The servants went by coach, which was overturned at Bewdley

<sup>&</sup>lt;sup>1</sup> Francis went to Aberystwith in May—probably to recuperate—and we find him on May 20, 30 and June 1 sending with brief letters to Dr Jeune long translations from Cicero, Greek exercises, translations of the Medea, Latin verses, etc., and asking the Doctor to forward his Donnegan, Ainsworth, and Lemprière. Clearly the terrible Doctor and his classical torments followed him into his Welsh holiday!

Bridge, the maids escaping but the butler being injured. The family usually posted, sometimes in their own carriage<sup>1</sup>.

It is worth recording that the first mechanical design of Francis that has been preserved dates from July 17, during this Aberystwith stay. It is entitled: "Francis Galton's Aerostatic Project, 17 July, 1835." It represents a flying machine with five passengers, a pilot and (?) an engineer. It was apparently designed to work by rather large flapping wings, with a sort of oscillating steam-engine. The mechanism of the flapping indicated in two additional rough sketches is not very clear. I do not know how far it was suggested by his Grandfather Erasmus' lines on air-ships<sup>2</sup>.

The only record of the autumn of this year is a letter from Dr Jeune of August 26, reporting the marked throw-back in Francis' educational progress due to his illness. He reports him, however, in excellent health and spirits with a good appetite, and notes that his vigour in cricket and football promise well for the continuance of his health. From the beginning of 1836, however, we have a small pocket diary. It is full of the frank outpourings of a very healthy boy, who has clearly no one to guide his tastes and sympathies. I shall give a few extracts:

Saturday, Jan. 2. Took Pincher with a cord and Crab and Game a walk. Darwin came back from Brum. I went to the Younge's party, pretty good tuck.

Monday, Jan. 4. Went to shoot at Claverdon, killed a partridge. Went to Wood's party. Friday, Jan. 7. Invited to Mrs Proby, did not go. Went hunting, pony fell over me and hurt my leg; they had a run of an hour and 10 minutes.

Wednesday, Jan. 13. Thawed. Went to Mr Curtis who gave me some feathers, and taught me a good deal about artificial flies.

Thursday, Jan. 14. Had a dinner party; the Dr<sup>3</sup> came here, much against my liking. Wednesday, Jan. 20. The old Dr went away with Dar to Brum. I walked out with Jones to fire my cannon.

<sup>1</sup> Earlier when Grandfather Galton took his family to Tenby, in Wales, he used to hire the only two hackney carriages in Birmingham to take part of his party.

"Or on wide-waving wings expanded bear
The flying-chariot through the fields of air.
Fair crews triumphant, leaning from above,
Shall wave their fluttering kerchiefs as they move;
Or warrior-bands alarm the gaping crowd,
And armies shrink beneath the shadowy cloud."

The Botanic Garden, Canto 1, 1. 291.

"There seems no probable method of flying conveniently but by steam or some other explosive material, which another half century may probably discover." Note to 1. 254.

<sup>&</sup>lt;sup>3</sup> Dr Jeune.

Monday, Jan. 25 is called "black Monday" and framed in black border, because of return to school.

Tuesday, Jan. 26. The Dr flogged a chap. The Dr's father was buried.

Friday, Jan. 29. Got 50 lines of Virgil for going down to school in the evening without Earp's permission, which he called an insult to his dignity.

Saturday, Jan. 30. A bit of a row at school got 30 lines from Gedge<sup>2</sup> for throwing chewed paper at the fellows' heads. The dame<sup>3</sup> tremendously cross.

Sunday, Jan. 31. The dame pretends she's half dead with a headache.

Monday, Feb. 8. Got an imposition for knocking down an umberella (sic!).

Tuesday, Feb. 9. The Dr in a tremendous rage, because I let a chap copy his exercise from me.

Wednesday, Feb. 10. The Dr came upstairs after we had gone to bed and caught us making a row; gave the chaps he caught tremendous impositions.

Thursday, Feb. 11. Got half the syntax to write out for not being able to say my lesson. Dr very sulky.

Friday, Feb. 12. Dame received a valentine, which told her that she liked a pot of beer, which I think is pretty true.

Friday, Feb. 19. Saw a stuffed cat with 6 legs 4 ears 2 tails and one eye.

The rest of February, while well filled with notices of imposition and "tremendous rows" with the Doctor and Earp, is also noted by young Jeune and another boy getting the small-pox. Most of the boys went home, but

Thursday, Feb. 25. Saw Pater who told me I was not to go home, which I did not much like only 2 left (?) in the 1st class.

March shows the same round of severity:

Tuesday, March 15. One boy was expelled and another flogged.

Thursday, March 17. Dukes was expelled.

Saturday, March 19. Took a walk to Edgbaston park. Earp bought a swing for us, to put which up we had to cut away some shrubs; we expect a row.

Sunday, March 20. Foe preached. The Dr made a tremendous row about the swing and said that it should be taken down.

Monday, March 21. The swing was taken down. We set up some leaping posts.

Tuesday, March 22. The Dr caught us looking over our books at school, a tremendous row. One of the blagards gave ——? a crack in his face.

Saturday, March 26. Bought a cat's gallows. Got caned.

Monday, Mar. 28. Got caned.

Good Friday, April 1. We were made to fast, but we went over to the grubshop and got plenty.

Saturday, April 2. The Doctor did not go round with his cane.

- <sup>1</sup> Presumably an usher at the Doctor's house.
- <sup>2</sup> Francis' form master.

  <sup>3</sup> Presumably the matron.
- <sup>1</sup> There were continual fights with the street boys of the roughest kind.

Wednesday, April 6. I was examined by Gedge in mathematics, the examiners were Cramer, Johnstone and Meryvale (?).

Thursday, April 7. Was examined in classics. I was 2nd in class. Tom Price got the prize. Bates and Holmes accesserunt. Came home.

After return to school the rather unedifying life begins again:

Monday, April 18. I knocked a fellow down for throwing a brick at me.

Tuesday, April 19. I thrashed a snob for throwing stones.

Wednesday, April 20. One of the boys bought a half-crown trumpet which made a tremendous row.

Thursday, April 21. We bought a birch pro bono publico for 15 shillings.

Friday, April 22. A tremendous row in the streets, on account of a blaguard thrashing one of our boys.

Monday, April 25. Saw the 1st swallow this year.

Tuesday, April 26. Got 30 lines of Virgil.

Wednesday, April 27. Got 20 lines of Virgil.

Tuesday, May 3. Got the syntax to write out for drawing a picture of a race.

Sunday, May 8. Arnold preached. A fellow gave me a thrashing in the street.

During the period May 2—20 measles broke out in the school, and Galton appears to have been ill and some days staying away from school. Possibly he had a mild attack. On the 20th "mater" wrote to ask for Francis to come home for Whitsuntide. But he is soon back again at the old round:

Thursday, May 26. Got an imposition in algebra to do for Gedge.

Monday, May 30. Turner became a day boy, because he had not sufficient attention shewn him.

Tuesday, May 31. A complaint in the Journal on account of the Dr sometime ago, setting a boy 100 lines for talking.

Friday, June 10. The Dr took away a knife which I had bought with Pater's tip the day before.

Thursday, June 16. Fletcher knocked the cricket-ball into the ivy and lost it. The Dr was black as charcoal.

Friday, June 17. Had to bring up a tremendous imposition to the Dr.

Tuesday, June 21. The Dr stayed at home, so we could not have any bolstering or fighting. Came home by the Regulator.

The summer holidays seem to have been spent at home; the weather was very hot—85° in the sun. Darwin had bought a pony, and the new pony and the old were driven tandem. Francis went to stay with his sister Lucy (Mrs Moilliet), and shot thrushes and even a swallow ("1st shot"), and caught perch and other fish. Later in the holidays he is shooting rabbits. This holiday also records:

Monday, July 18. Went to Stourbridge in the gig with Pater to see the locomotive engine.

Wednesday, July 20. Went to Kenilworth to see a new school opened, and electrified the cat and girls.

Friday, July 22. Went with Emma to Kenilworth to sketch.

On August 8 Francis goes back to school, and the old state of warfare is resumed. On the 11th the impositions begin; then the boys go to bathe in the canal, but the Doctor stops it, and they go to Ladywell bath. August 22 and 23 there are further impositions; on August 24 Hawkins gets thrashed. Sept. 1st Galton took a walk in the evening by French leave, but was seen by the servants. Sept. 7 and 10 there are impositions, and on the 9th Galton is nearly thrashed by the Doctor for not knowing his lesson. Sept. 12 there is another imposition, but perhaps consolation in the record that the cat has run away with one of the partridges presented to the Doctor!

Saturday, Sept. 17. Walked out, had an imposition. Dr in a black humour.

Sunday, Sept. 18. Had cider for dinner. I think the Dr is getting rid of it, for it tasted very sour.

Tuesday, Sept. 20. A row between Hawkins and the blackguard; had two chases after him, but at last lost him.

Wednesday, Sept. 21. Lines missed for the 1st time since he [?the Dr] has come to the school.

Thursday, Sept. 22. Was too late for school got an imposition.

For change on Sept. 27 there was a "regular row" with the dame, and so through the months of October, November and December we have the usual round of boyish pranks and punishments, interspersed with touches of more general interest, e.g. Oct. 20 "The gas was lighted for the first time," and Oct. 21 "The gas all of a sudden went out. Got 40 lines." While on Oct. 22 "We walked to see the railroad; had some fun, was not in time for breakfast."

On the 27th of October Francis sends a very piteous letter to his sister Adèle:

My DEAR ADÈLE,

Thanks for the paper. I have not been able to write on account of the hard work and many impositions I have lately had—30 one day and 10 pages of Gk. grammar to write out, the next 40, and the next 40, so that I have not had the least time. Another boy has left and is believed to be in a consumption. Indeed I never knew such an unhappy and unlucky school as this; 2 more will leave at Christmas, and I would give anything if I could leave it too. There has been a great row about some chaps getting books from a neighbouring circulating library, one book the Dr cribbed and another Earp threw into the fire, and some of us were called into the study, and he accused us, telling the greatest story possible but luckily he was found out in most of

them (sic). I do not like the Dr taking our class at school, he expects the grammar said more perfectly than we can, & thrashes the lower part of the class for every mistake they make in construing; this morning he thrashed 11 fellows in 8 minutes!! So we have no peace at home through Earp, and no peace at school through the Dr. I wish Papa had taken me away at the Holidays, but of course he won't; he has no reason that I know of except about changing schools, as forgetting that I am not getting on the least and every day is a day wasted. How is it then expected that if I leave school at 17 as Pater has told me, I shall know enough to pass examination at college and again, as you know how easily Latin and Greek are forgotten am I to turn away wholly from classics to doctoring, which of course [will] confuse me and make me forget the greatest part of what little I have learnt. How much better it would be to remove me before it is too late. But, however, I suppose Papa will not change, and therefore I must bear the consequences. Good bye, and believe me, Your affectionate brother, F. Galton.

Adèle, like a good sister, sent Francis' letter on to her father with a postscript added:

"I have just received this letter and send it on for your perusal in case you should like to make any inquiries, as poor Francis appears much downcast..."

Tertius Galton must have shortly afterwards communicated with Dr Jeune, for there is a letter of the latter's dated Dec. 7, 1836. He thanks Mr Galton for his frankness and confidence, and promises to communicate with him if he considers a change requisite in the course of Francis' education, or if a public school instruction is really not calculated to form his mind. Dr Jeune saw that Francis had great powers, and believed that if he would apply them he would hold a very distinguished position both in his school and later in the world. He then states that he had that very evening been struck with the vigour of a translation from Cicero which Francis had sent up to him, and that, although there were undoubted inaccuracies in the exercise, it still proved that he possessed a mind of no vulgar order. Dr Jeune is sure that Mr Galton will second his exertions by paternal advice.

The letter is one of a conscientious man who has not the least insight into the wants of such a nature as Francis Galton's. Here was a boy of immense physical and mental activity, longing for employment of hand and head, and no occupation is found for him but a drill in grammar with imposition and cane as sanctions! The harshness of treatment is no doubt modified now in many of our schools; the warfare of master and boy is not so continuous. But is the workshop, the laboratory, and the field expedition, the combination of observation and physical exertion universally provided even now to meet the needs of such natures as Galton's? Have we even now-a-days any true test

for ascertaining whether a man has real insight and sympathy with boyish growth—any other test than a brilliant degree in classical or other studies—before we appoint him to be headmaster of a school, where quite unconsciously he may make one boy after another miserable? I very gravely doubt it, and because I doubt it I have quoted much from Francis Galton's diary, and must now give a letter written a few months later (February 22, 1837). In the interval, i.e. since the letter to Adèle, the Doctor had been apparently trying to treat his boys more as men, but the general scope of his method remained clearly the same:

MY DEAR PAPA,

Thank you very much for your kind letter and allowing me to take mathematical lessons from Mr Mason. I have come over to your opinion that Classics are of the greatest use in training the mind, but I feel certain that I do not get on as I ought to do here. But even not counting that; there is a thing which you must own is of almost equal importance with classics, and that is extensive reading in English, both History and Poets<sup>1</sup>. Now although the Dr says he approves of that kind of reading, yet when he comes in in the evening and sees us reading any book besides a classical one, he always says to us "Have you done your lessons?" Then, if we say Yes, he makes us say them; then if we do know them perfectly he tells us to look over what we have done before, etc. In fact although nominally he approves of it, yet really he tries to put a stop to it.

Also on thinking it over, it seems to me that 6 books of Euclid are very little for 2 years<sup>2</sup>. Now there was one thing which I forgot to say about English reading, that my time of life is the one to make the most use of hereafter, and can any person get on anywhere without having read certainly a great deal of English? When I read now I am obliged to read under the table at meals, or pick up time as I can which amounts to very little in the end. As for my Classics I certainly am not getting on. If at Easter we are made part of the Doctor's class we shall be put back and the old round of impositions and hard work will come again as the Dr himself has assured us more than once. If we remain on the other hand in Gedge's class, I shall keep where I am. I ask you in this letter to remove [me] not because I am unhappy here, for certainly we have much more liberty and are treated more as men but because I feel I am really not getting on. I am not going down in my class, but then my class is

- <sup>1</sup> On Dec. 14, 1836 his diary tells us that he "bought Lord Chesterfield and some pomegranates." In Oct. 1837 he thanks his mother for sending him money to buy Southey, but Southey being unprocurable, he had purchased Crabbe.
- <sup>2</sup> I think Francis had learnt in mathematics a good deal more than this—perhaps partly with Mr Mason. Thus there are from the year 1837 fragments of algebraic notes on homogeneous products and limiting ratios. On a slip of paper recording work done, we have not only the 6th and part of the 11th books of Euclid, but Algebra Part I and Part II, except cubics, biquadratics and theory of equations; Statics and velocities of bodies, Dynamics, oscillations, projectiles, etc.; Hydrostatics and Hydraulics, and a "very little Differentials."

remaining where it is. I leave it to you to do as you think best; but I must say I think I have good ground for what I have said. Goodbye and believe me your affectionate son Francis Galton.

Although effective reform of the Free School did not come during Francis Galton's school time, I cannot help thinking that his attitude of protest, to some extent directly and more perhaps indirectly through his father, produced real changes. The Doctor writes to Tertius on Oct. 23, 1837, that he is studying Edinburgh schools, and that the Governors have determined at Christmas to add to the establishment a Mathematical and an English master, and further, at the beginning of 1839, teachers of French and Drawing, and one more of English. The final report which the Headmaster gives of his pupil is characteristic, but shows the influence of the boy notwithstanding the constant warfare with the masters. Mr Gedge reported that he went on well with his mathematics, displaying much mental power and increasing daily in accuracy. The Headmaster confirmed this judgment, remarking that Francis

"found it irksome to tie down his attention to the exactnesses and niceties which distinguish a good classical scholar. It is generally the case that boys dislike most what is most needed for their peculiar turn of mind. He will I think do well, for though he does not entertain all the horror of false quantities or all the admiration of Greek accents which are felt by some of his fellows, he is docile and willing to submit to occasional defeat."

Such the opinion of the Master of the Boy; in his *Memories* Sir Francis gives the opinion of the Boy on the Master:

"I retained Dr Jeune's friendship until his death, and it was impossible not to recognise his exceptional ability and educational zeal, but the character of the education was altogether uncongenial to my temperament. I learnt nothing and chafed at my limitations. I had craved for what was denied, namely an abundance of good English reading, well-taught mathematics and solid science. Grammar and the dry rudiments of Latin and Greek were abhorrent to me, for there seemed so little sense in them" (p. 20).

Galton had been anxious and willing to learn, but he had been given stones instead of the bread that he hungered for, and thus his chief school years were years of stagnation. It is curious to find him uttering in 1908, when 86 years of age, the very opinions he had given in 1837, when a boy of 15! I have spent long over this school period because it is not only interesting from the standpoint of educational history, but it is possible that some few parents reading these lines may save another boy from a like period of depression and stagnation, for I sadly fear its possibilities have not for ever vanished.

The summer of 1837 had been spent at Worthing with expeditions on the Downs to Cissbury and Chanctonbury Rings. Frank was studying fishes, making sundials, and riding with his sisters and Darwin. In the preceding Easter he had projected a tour to Bangor, to attend cathedral service there, since he "had never heard it chaunted," then to Snowdon, Beaumaris, and back by Liverpool and Manchester (Letter to Tertius Galton, March 26, 1837). I am not certain whether the tour came off. Perhaps it was postponed till the Birmingham and Liverpool Railway was opened. This happened on July 4, and in September Tertius Galton, his daughter Emma and Leonard Horner, travelled from Birmingham to Liverpool, by what is now the London and North-Western Railway, to attend for the first time by train the meeting of the British Association.

Francis lingered on at the King Edward School for the first half of 1838, but he knew that his time was over, and that freedom and more congenial pursuits were soon to come<sup>3</sup>. His father had arranged that he should enter the General Hospital, Birmingham, at midsummer The proposal was made at the Weekly Board, as House Pupil. December 8, 1837, Rev. John Garbeth, Chairman, "Resolved: That the Secretary do write to Mr Galton informing him that his son will be admitted a Pupil at the Hospital at Midsummer next at the rate of 200 guineas per annum." It was afterwards arranged that he should postpone his medical studies till October. His appointment was confirmed by the Weekly Board, December 29, 1837, R. T. Cadbury being Chairman. Dr Booth, the husband of his aunt Adèle, and Mr Joseph Hodgson, who had seen him into the world, seem to have acted as his medical sponsors. This was the bridge, not a very direct one, but of great import in its influence, by which Francis Galton passed from

<sup>&</sup>lt;sup>1</sup> This letter is of considerable interest. Francis discusses quite freely with his father his work in mathematics and his chance of being second in the class. He also discusses with his father the proposition as to the equality of the triangles with two sides of each equal and two not included angles,

<sup>&</sup>lt;sup>2</sup> A boyish poem on the Spanish Inquisition has survived from March of this year. Without any definite evidence, it seems to me to show signs of the study of Erasmus Darwin's verses. Galton never attained any power as a poet, but from sixteen onwards to the end at least of his Cambridge days, he was very fond of making occasional verses.

<sup>&</sup>lt;sup>3</sup> In his last school letter to his father, chiefly about the medical man he was to live with in Birmingham, and his gratitude for the new educational departure, Francis notes that the Doctor is "sworn in to-day at Jersey"; he, too, was leaving the field of battle.



HUDSON GURNEY and MARGARET GURNEY (Margaret Barclay), sister of Captain Barclay.



MRS FRY (Elizabeth Gurney).

Hudson, Elizabeth and Margaret Gurney were all great-grandchildren of David Barclay of Cheapside, and second cousins to each other and to Tertius Galton, another great-grandchild.

the harsh discipline of a classical school into the fascinating field of scientific observation.

But the year was to be memorable in other ways. The house at Claverdon, the country home of the Galtons, was taken in hand. June the Coronation of Queen Victoria took place. On the 26th Francis Galton went up to London to stay with Darwin in his lodgings, and spent most of the time with his sisters at the Howard Galtons in Portman Square. It was his first long stay in London, and his friends took him out each day sight-seeing. Every house had thrown out balconies, and scaffolding, and galleries, covered with crimson cloth, had been built for spectators. The Hudson Gurneys (see Plate XLVII) had obtained a ticket for Sister Bessie in the Abbey itself. Uncle Howard and Sister Emma were at the Reform Club, Darwin at a Mr Collins', the Hubert Galtons in St James' Street, and Francis got a seat in Pall Mall for 30s. Sister Bessie (Mrs Wheler) describes the excitement both inside and outside the Abbey very vividly for us, the crowds, the illuminations, the ceremony and the feelings of the day itself.

I have frequently thought that Galton's idea of carrying, when in a crowd, a block of wood or a brick in brown paper which he let down by a piece of string and stood upon, as well as his "hyperscope," a simple tube with two parallel mirrors at 45 degrees to its axis, were devices impressed upon him by his experience at these coronation festivities; they satisfied his desire to see over the heads of a mass of people. Unfortunately no letter of Francis himself, describing the events, has been preserved. But the formal beginning of the new reign was the formal beginning of Francis Galton's adolescence. Henceforth he was no longer a boy, but an apprentice, starting his craft; rather early, it is true—at sixteen years of age—and rather old-fashionedly, but he was strong in character, and given freedom, he could and would absorb all that his active mind needed for its sustenance.

<sup>&</sup>lt;sup>1</sup> There is an excellent letter, dated Leamington, December 9, 1837, from Samuel Tertius to his son, announcing the medical appointment. He writes:

<sup>&</sup>quot;I really believe, if you turn the opportunities you will have at the Hospital to the best account and avail yourself of the advantages of explanation that my medical friends there will be disposed to give you, if they find you willing to profit by them, that you will begin your medical career very propitiously. You must be careful to avoid low company and not be led astray by any pupils there that may not be equally well disposed—but I have great confidence in your wish to do what is right, and when we meet at your approaching holidays, we will talk over all your plans and arrangements in good earnest and particularly in reference to your masters and studies whilst at the Hospital."