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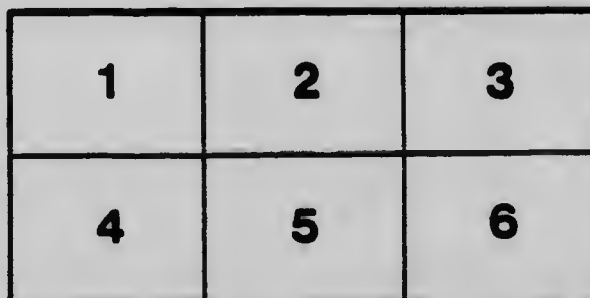
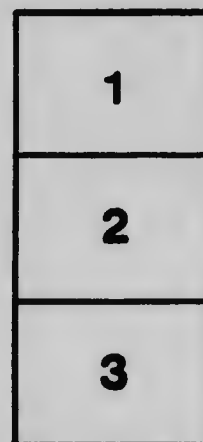
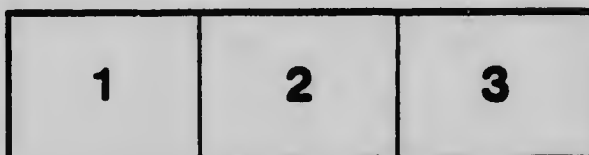
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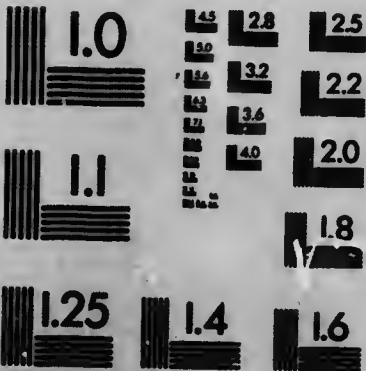
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M. LIFE AND WORK



Edmund K. Murphy





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MY LIFE AND WORK
BY EDMUND KNOWLES MUSPRATT
LL.D., F.C.S. ETC.
WITH FIFTEEN ILLUSTRATIONS

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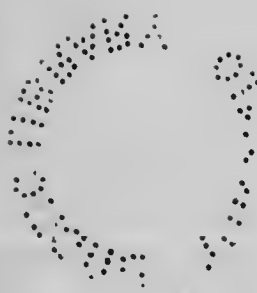
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PREFACE

WHEN I first began these memoirs five years ago at the request of my family and friends I had no intention of publication, and it naturally took the form of a personal narrative following as nearly as possible chronological order.

The first part I was able to write myself with comparative ease, owing to vivid recollections of my early life, assisted by my sister, Mrs. Harley, who had been my constant companion both when I was a student in Germany and on frequent visits to other parts of the Continent.

My eyesight, however, began to fail, resulting in a short time in almost total blindness, which compelled me to resort to dictation, leading to much inconvenience and difficulties, as in the second and third parts constant reference was required to newspapers and periodicals to ensure accuracy in treating of public affairs which I could not do myself. This accounts for the mixing up of purely personal and family affairs with public events of the time.

When the memoirs were finished and had been read by some of my family and Mr. John Lane, they thought it might be of some interest to a wider circle and urged its publication, to which I assented.

Great changes took place in Europe after the Revolu-

tion of 1848, which turned Italy from what Prince Metternich called "a geographical expression" into a United Kingdom under Victor Emanuel; Germany became united under the dominion of Prussian militarism, culminating in war against France in 1870; and the Civil War in the United States led to the emancipation of the slaves and a change in the constitution of that country. All these movements, in which I took a deep interest at the time when a student in Germany and paying frequent visits to Italy, are touched upon in these memoirs, and may I think prove interesting to readers of the present generation.

As stated above, nearly the whole of this memoir was written before 1913, and the only addition since the outbreak of war has been a chapter on the literary and artistic developments of Liverpool, in most of which I have taken part.

The war of Germany against France in 1870 came to an end in 1871 and France had to submit to the most onerous terms imposed by Germany, including a large war indemnity.

The money received from France was wisely expended in improving education and the means of transport by canal and railway, also in direct support of commerce and industry. The prosperity which followed, rapidly enriching a nation which up to that time had been comparatively poor, exercised a pernicious influence on a large portion of the people, who before the war had been generally antagonistic to Prussian militarism and bureaucratic government, and I am naturally grieved to notice the great change in the character of the Germany I had known in my youth. Most of my old friends have been

dead for some years, and from 1889 onwards I seldom visited Germany, but when I travelled I turned my steps towards Greece, Italy, Spain and France. The passage of the Germans through Belgium in violation of Treaty obligations, and the atrocities committed, naturally roused the indignation of the whole world; the submarine warfare which was carried on ruthlessly and in defiance of the rules of international law, strikingly exemplified in the torpedoing of the *Lusitania*, increased this indignation, and now many Germans are asking the question: "Why is Germany so hated?" The general silence of the German press under the despotic rule of Prussian ideas plainly indicates that no lasting peace is possible until the spirit of militarism is crushed by the armies of the allied powers.

During the progress of the book I have been indebted for valuable assistance to Mr. John Lane; Mr. Shaw, City Librarian; and Mr. Dibdin, Director of the Art Gallery, to each of whom I take this opportunity of expressing my sincere thanks; and after my failing eyesight the services of my secretary, Miss Isabelle Medlicott, have been invaluable.

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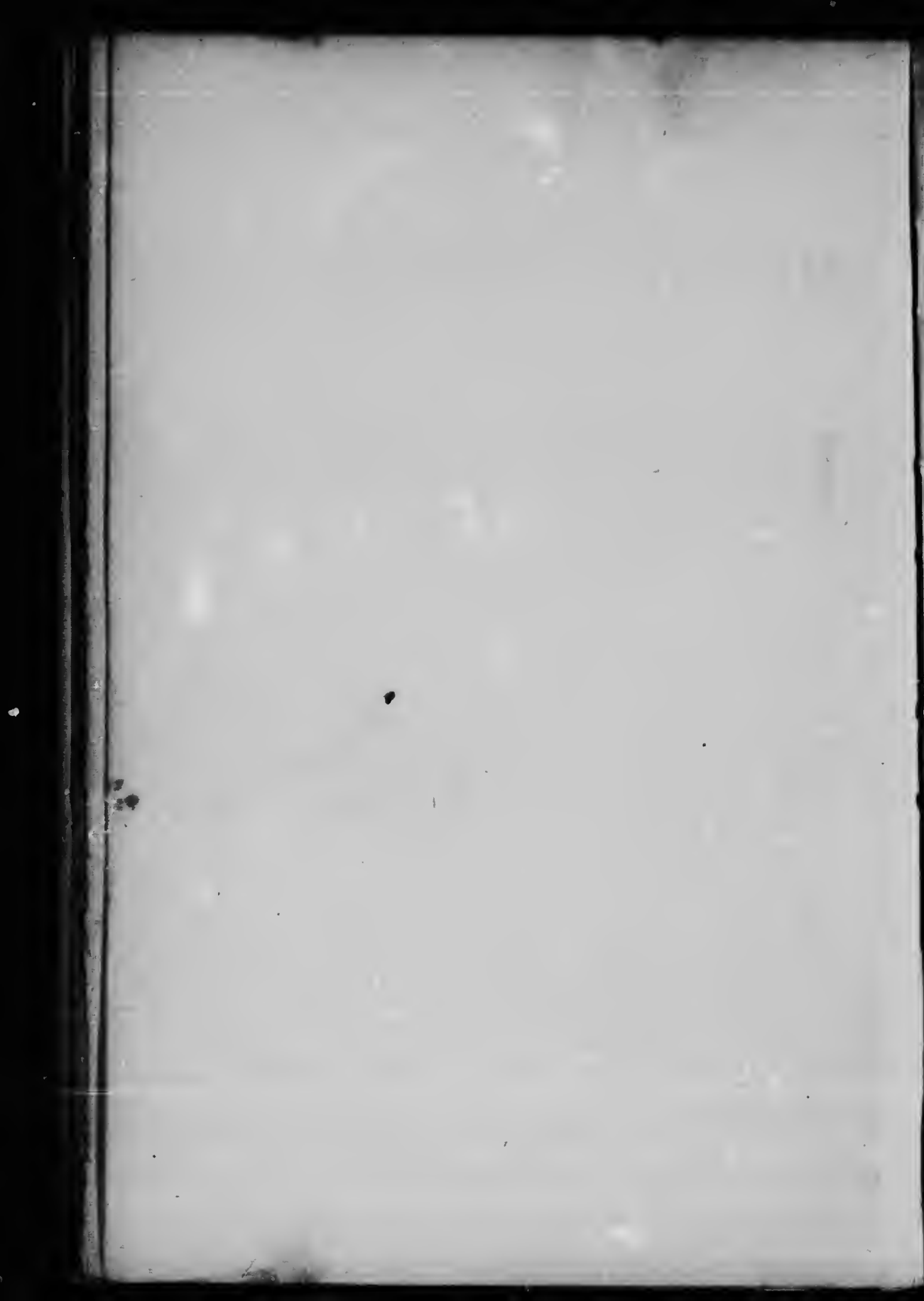
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MY LIFE AND WORK



MY LIFE & WORK

CHAPTER I

1833-1855

I HAVE been frequently asked by my children and many friends to write down reminiscences of my life, including, as they do, some account of celebrities I have known.

I have shirked the undertaking because I have never kept a diary, and writing has always been irksome to me; but now in my eightieth year, with more leisure, I propose to attempt the task and to jot down the main incidents as far as memory serves me.

I am the youngest son of the late James Muspratt, the father of the Alkali industry in Lancashire, whose life previous to his becoming a chemical manufacturer was most romantic. The Muspratt family originally came from Winchester, where they evidently took a leading part in the municipal life of that town; one ancestor having been twice Mayor of Winchester in the early seventeenth century.

My father was born in Dublin, August 12, 1793, his father was an Englishman whose brother, John P. Muspratt, was a director of the East India Company. His mother was a Miss Mainwaring, one of the old Cheshire family of that name.

My father was sent to school in Dublin, where he made his mark, winning many prizes. At the age of fourteen he was apprenticed to a Mr. Mitcheltree, a wholesale chemist and druggist in Dublin, with whom he remained three or four years. In 1810 he lost his father, and the following year his mother, so that he was left to make his own way in the world. His father's property was involved in a Chancery suit, and weary of waiting for its termination, and having exhausted what little ready money he possessed, he embarked for Spain in 1812 to join the army and seek his fortune as a soldier.

After vainly endeavouring to obtain a commission in a cavalry regiment, he returned to Lisbon, and in order to reach home enlisted as a midshipman on a British man-of-war. After his return to Dublin he started a chemical manufactory on a small scale, but his great ambition was to manufacture alkali by the so-called Leblanc process, and with this end in view he settled in Liverpool in 1823 and under great difficulties commenced the manufacture of soda on a large scale.

I was born at Linacre, near Bootle—the district then called Bootle-cum-Linacre—on November 6th, 1833. My father's house was on the shores of the Mersey close to the old Bootle landmarks, two obelisks, which served to direct ships coming up the river. I have no recollection of the house during my father's occupancy of it, but it remained a pleasant villa residence for many years, until the Canada and Alexandra Docks were built.

My father removed about the year 1835 into Liverpool, to a large house in Pembroke Place, afterwards used as a lying-in hospital. There was a small field, upon which in later years the adjoining church was erected. I well

remember the house, with a large room used as a school- and play-room, and sometimes for dancing in the evenings.

In 1837 the British Association met in Liverpool, and my father made the acquaintance of Justus von Liebig, the great German chemist, who was the most conspicuous guest on that occasion. He was only about thirty-five years of age, but had already accomplished a prodigious amount of work both in teaching and research, and he was the precursor of all teaching laboratories, with which now no University or Technical School can dispense. The later laboratories were not confined to chemistry, but were applied to physiology, pathology, physics, biology, etc. Liebig attracted students from all parts of the world to Giessen, of which I shall say more later. At the time of the meeting of the British Association he was devoting himself to the application of chemistry to agriculture and physiology, and at the request of the Association he wrote and published his *Handbook of Organic Chemistry, and Chemistry applied to Agriculture and Physiology*. He was well received in England, and among statesmen Sir Robert Peel, with Pusey the agriculturist, recognised the value of his services to the country. Pure science was not appreciated by the English people, and the British Association was specially founded to promote the study of science with a view to popularising it.

My father did not remain long at Pembroke Place. From the first, he enjoyed the sight of the Mersey with its fleet of sailing vessels inward and outward bound, and early decided, when he had the means, to build a house on its banks. Having bought about twenty acres on the

shore at Seaforth, on the breaking up of the entail of the Molyneux Estates, he was able to carry out his wish—up to that time he could not obtain a freehold—and he determined to build a house of noble dimensions and classic style, on land which consisted of nothing but sandhills, without a tree. He commenced at once to plant trees and lay out the pleasure grounds.

In order to give constant attention to the building and the laying out of the grounds, he removed for a short time to a house now occupied as the Vicarage, near to Seaforth House, built by Sir John Gladstone, whose son, Mr. William Ewart Gladstone, upon meeting my daughter Julia, many years later, spoke of his early recollections of gathering primroses on the banks of the little rivulet, the Rimrose, which used to run at the bottom of my father's garden.

Alas, its waters have been long since choked up, warehouses and railway-sidings standing on the sites where primroses once abounded. For the city has crept up to our garden walls and the Gladstone Dock has now been built on land adjoining the Seaforth Hall grounds. When the *Aquitania* or other big liners are in dock they overshadow practically the whole landscape and seem to sit in our front lawn. The Gladstone Dock, be it noted, was not called after the great statesman, but after Mr. Robert Gladstone of Dock Board fame.

The house standing out solitary as it then did was a very noticeable building and used to be a landmark for passengers from New York. Ellen Terry once remarked to a friend of mine that she looked forward to the sight of the Greek Mansion which stood on the banks of the Mersey as a first glimpse of home.



SEAFORTH HALL, WEST FRONT
From a photograph

T. Hanson Pictor, Architect



I have only pleasant recollections of the time spent during the building of Seaforth Hall, and my daily amusement was riding my pony on the shore to a small cottage which, being the last house until you came to Southport, we christened "The World's End." There were at that time only three or four houses in what is now Church Road, and no buildings between Seaforth and Waterloo, except what is now known as "Potter's Barn."

In the direction of Liverpool the shore extended to what is now the Stanley Dock, a distance of three miles, and in fine weather many of the residents of the neighbourhood rode into town on horseback, instead of taking the canal boat from Litherland, or driving along the recently made road parallel with the shore, passing through two toll bars.

Along the road were several good houses or villas, in the district called Bootle Marsh, and there were at intervals roads leading down to houses situated on the shore. Among these was one built in castellated form, by Mr. Miller, and called "Miller's Castle." As we knew the family well, my sister Emma and I spent many pleasant days, as children, in company with a boy called Willie Ellis, pretending we were besieged in an old castle, and rescued after suffering partial famine and other horrors. This boy had afterwards a brilliant career in the army, at the siege of Sebastopol and in India, and was present at the assault of the Redan, owing to which he was always known hereafter as "Ellis of the Redan." Mr. Miller was well known in Liverpool and Bootle; besides giving his name to the castle, he also built a bridge over the canal, and when the Southport railway was opened in 1848 or

1849, the station between Sandhills and Bootle Village, now Bank Hall, was called Miller's Bridge.

Thirty years before my father took up his residence at Seaforth, Sir John Gladstone, who lived at Seaforth House, a nice residence in its own park, built the church. In those days the family at the "House" used to walk through their own park, which was very prettily laid out, to church. Mr. Gladstone had left before my father came to Seaforth, and the house was occupied by people of the name of Paulet. Mr. Paulet was a funny looking little man, but very intelligent, and his wife was a remarkably tall handsome woman, one of the beauties of Liverpool. The Paulets knew many interesting people, who often visited them; amongst others, Carlyle and his wife, the Hon. Mrs. Norton, and Miss Jewsbury, whose novels were the fashion of the day, and of course in those times women writers were few and far between.

There were no cabs at Seaforth, and only two livery stables, where old carriages could be hired. On party nights these were in great demand, especially a grand old yellow coach—in that I went to many a nice party in my youth. The name for these conveyances was not "cab" but "fly," a term used for a hired vehicle until only a few years ago in this neighbourhood.

In consequence of Seaforth being so isolated it had quite a little society of its own, especially if any resident had visitors, when parties were always given, and very enjoyable social evenings they were. Of course dinner was always earlier in those days, consequently parties began at seven o'clock or soon after, but as one fly had to do duty for several houses, the guests took some time to arrive. Then there was conversation and some music;

often there were two or three whist tables ; and if there happened to be young people, a dance was got up. If it was only a small party, trays were laid on a table in the drawing-room, with sandwiches, cakes, and wine, and, if the weather was cold, port negus ; and the party was ended by twelve o'clock. If it was a larger party, supper was laid in the dining-room, the entertaining being all very simple and homely but very pleasant.

Most people kept some kind of carriage, for, as I have said, there were no means of getting to town except by driving, and most people had a horse and gig if nothing more luxurious ; those ladies who possessed a carriage generally invited some friend to drive into town with them to do shopping. My father had a most impressive carriage : a large chariot, with place behind the coachman's box for an " Imperial," which was a receptacle for luggage when the carriage was used for travelling. The coachman's livery was equally imposing : yellow breeches and top-boots, and a top-hat with silver band, which, very wisely, had a mackintosh cover to put on when it rained. His top-coat was made with one cape over another, the upper one being quite small and forming the collar, and when not in use this cape was hung over the coachman's box. The footman's livery was the same but with no cape ; and to complete the turn-out it was the fashion in those days to have one or two spotted black and white dogs to run under the carriage. They were intelligent creatures who, when the carriage stopped lay down under it until it started again. Our dogs were named Pompey and Cæsar.

My father made several journeys in the carriage, driving sometimes up to London with his own horses ; and it was wonderful how the old coachman, a most devoted servant,

drove in London, where naturally the traffic was much greater than in Liverpool.

In the year 1838 I was sent to a boarding school at Gateacre, kept by Miss Hunt and her two sisters. This was considered one of the best preparatory schools for boys, and there were among my schoolfellows the Laces, Cromptons, and Rathbones, sons of some of the best known Liverpool families. H. E. Roscoe's mother lived at Gateacre, and young Roscoe, afterwards Sir Henry, was sent first as a day pupil, but later for a time as a boarder. He evidently did not like the school. In his *Life and Experiences* he says: "We had rice pudding at dinner before meat, and on Saturday night there was a general washing of feet in the footpans, and it was our general belief that the watery rice puddings we were made to eat were cooked in the footpans."

Sports, now so common, were in those days almost unknown for younger children, and there were no games except marbles and the trundling of hoops, at Miss Hunt's, and I always felt half-starved, tired, and out of sorts. The holidays were six or seven weeks in the summer—July and August—and four weeks at Christmas, which I much enjoyed, for we always had a merry time with dances, games, and private theatricals.

About this year my eldest brother James Sheridan Muspratt was sent to America, to learn business. He went out in the *Britannia*, one of the first steamers belonging to the Cunard Company, and my father made a trip to the United States, where he met and became great friends with E. K. Collins, founder of the celebrated Collins Line, which for a time competed successfully with the Cunard. The vessels were neither as well built nor as well manned

as the Cunarders, and after the loss of the *Arctic*, with Mrs. Collins on board, the Collins Company failed. One Christmas young Collins, the son of E. K. C., stayed with us, and on that occasion he appeared, during an interlude in our amateur theatricals, as a Negro Minstrel, singing "Jim Crow," "Lubly Rose," and other popular negro songs; I, as his pupil, danced a hornpipe.

In about the year 1843 or 1844 I was sent to Worksop, where Dr. Heldenmaier, a pupil of Pestalozzi, kept a boarding school of about sixty boys. The system of instruction followed was very different from that of ordinary English schools, being based on Pestalozzi's principles, and the teaching both of languages and the rudiments of science made more interesting, as it discarded ordinary methods of instruction and encouraged reasoning and practice. We had a chemical laboratory, a rare thing in those days.

At that time Worksop was not connected with the railway, and on leaving the train at Eckington we had to proceed by coach for two or three hours through beautiful country, in the direction known as the "Dukeries."

The school was situated in the middle of the small town of Worksop, of about 10,000 inhabitants, with a large playground of twenty acres. Part of the area in front of the house and garden had parallel and horizontal bars, a fly rope, and ropes and ladders for climbing, for gymnastic exercises, and, later, Dr. Heldenmaier enclosed a large yard for use as a covered gymnasium during the winter months and bad weather. This was fitted up by W. Huguenin of Liverpool, at that time the most celebrated instructor in gymnastics in England, at whose gymnasium

a large number of the young men of Liverpool took exercise every day.

We were allowed during our walks to gather wild flowers and to catch butterflies, and in this way we had practical instruction in botany and entomology.

In the school was a good Natural History Museum, and, as mentioned before, at that early date we had a Chemical Laboratory. Our scientific instruction was of a practical character, and therefore more interesting than in most schools, where science was ignored and the classical languages taught in a way which is now admitted to be faulty. Many of these improvements have been adopted by our Public Schools, to which fine laboratories are now attached and science taught where once the very name was tabooed.

With good food, plentiful but plain, I soon recovered my health, and eagerly took part in football and other games, and became a proficient gymnast. Cricket I did not care for, and no doubt my being short-sighted was partly the reason.

Once each half-year, on Dr. and Mrs. Heldenmaier's birthdays, we made an excursion, partly by coach and partly by rail, to places of interest in the neighbourhood: Newstead Abbey, Bolsover, Lincoln, Chesterfield, Sheffield, Chatsworth, Hardwick Hall, Matlock, etc. The country round the remains of old Sherwood Forest contains magnificent trees, particularly old oaks. Shireoaks, only about three miles distant, was celebrated for an oak which it was said bordered on three shires—Yorkshire, Nottinghamshire, and Lincolnshire. It was quite hollow, with only the trunk remaining.

Shortly before I left school, coal had been found, and

the Shireoaks Colliery was opened up by Sir J. Walmsley, Jackson of Birkenhead, and others, greatly to the detriment of the beauty of the country in that direction. Manor Park, Welbeck, Clumber, and Thoresby still remain untouched, with Greendale Oak and Robin Hood or Major Oak, in the latter of which I have stood with about thirty or forty boys—of course some on each other's shoulders.

Most of the parks were within two to four miles of the school, and formed the object of our afternoon walks once or twice a week. Roche Abbey, about eight miles from Worksop, we visited once a year during the spring, the elder boys walking there and back. It was a very secluded spot and rarely visited by strangers. We always collected large quantities of forget-me-nots and lilies of the valley, but the smell of garlic in places was overpowering.

In the neighbourhood of the school were several lakes or ponds. At Clumber, about four miles distant, was a large one over a mile long surrounded by trees, and in a very severe winter this was frozen, and we enjoyed splendid skating, the ice owing to its sheltered position being as smooth as glass. Nearer to the school were shallower ponds, which were frozen almost every year I was there, and afforded ample opportunity for that delightful pastime. Altogether my time at Worksop was a very happy one. I made good progress with my studies, learning both French and German, which I could read and speak fairly well before I left, and which I found of very great advantage when I went to Germany.

During my holidays I met several of my father's friends, amongst others, Charles Dickens, Samuel Lover,

my godfather Sheridan Knowles the dramatist; Miss Charlotte Cushman and her sister Susan, the latter becoming in 1848 the wife of my brother, James Sheridan Muspratt. Sheridan Knowles was one of my father's oldest friends and frequently visited him at Seaforth. He was born in 1784 and became a dramatist, author of *Virginus*, *The Hunchback* and *The Love Chase*, produced at Covent Garden under Macready's management and performed by the most celebrated actors of the day, holding the stage for many years.

He also published verses, and delivered lectures on Shakespeare's characters, besides acting in many of his own plays. He gave lessons in elocution to many clergymen and barristers, among the latter being James Whiteside, a very eloquent speaker, who defended O'Connell in the State trials of 1843 and became afterwards Lord Chief Justice of Ireland. In his later years Knowles became very religious and regretted having had anything to do with the stage.

Edmund Gosse in his book *Father and Son* says:—
“One day when fortunately I was alone, I was accosted by an old gentleman, dressed as a dissenting minister. We became great friends and he took me at last to his house, in which was a picture of himself in fancy dress as he had appeared, as he said, ‘long ago in my unconverted days, on the stage,’ explaining to me that he had been an actor and a poet before the Lord had opened his eyes to better things. My friend was no less a person than James Sheridan Knowles, and it was from his lips that I first heard fall the name of Shakespeare.”

My father had always been interested in the stage

and had sought the companionship of actors and playwrights even in early life.

Pending the decision of the Chancery suit, in which he was involved on the death of his parents, he came in contact with some persons connected with the theatrical profession, and assisted in the first introduction of Miss O'Neil, the well-known actress, to a Dublin audience.

She, along with her father, were the prototypes of Miss Fotheringay and Captain Costigan in Thackeray's *Pendennis*.

Apropos of this, my father often told us the anecdote of his giving, with some others, a ball in Miss O'Neil's honour with a view to obtaining an audience for her first appearance in Dublin (she having previously only appeared in small country theatres), and her father arriving so intoxicated that the hosts had to take turns in keeping him downstairs; where by adding more to his already copious libations they brought him to that condition of docility in which he could be quietly removed to his lodgings in a car. Many years afterwards on the death of my father, Mr. Wilmer, a former editor of the *Northern Times*, and later of a Birkenhead paper, wrote:

"Well do I remember when, between thirty and forty years ago, Seaforth Hall was the most hospitable mansion in, or near Liverpool. Mr. Muspratt delighted in having the best men and women of the day under his roof, and it was at the stately hall on the Seaforth sands that I first had the privilege of meeting and making the acquaintance of Charles Dickens. The occasion was the performance given at the Philharmonic Hall by the Guild of Literature and Art, for which the late Dr. Sheridan Muspratt was the

local honorary secretary; Dickens, Douglas Jerrold, Mark Lemon, John Forster, and Miss Emmeline Montague (the widow of Mr. Compton, the famous comedian), were staying at the Hall, and in the evening after the successful performance, the whole brilliant company, the then Mayor and the members of the local committee, were present at a splendid entertainment given by Mr. and Mrs. Muspratt, from which none went home 'till daylight did appear.'

The last time I had the privilege of visiting Seaforth Hall, I met Miss Eliza Cook; Miss Cushman and her beautiful sister (then just on the eve of marriage with Dr. Sheridan Muspratt); Samuel Lover, who sang his song, 'Mother, he's going away,' for the first time on that occasion; the great tragedian, Mr. Macready (who was then starring at the Theatre Royal); and Mr. M. J. Whitty.

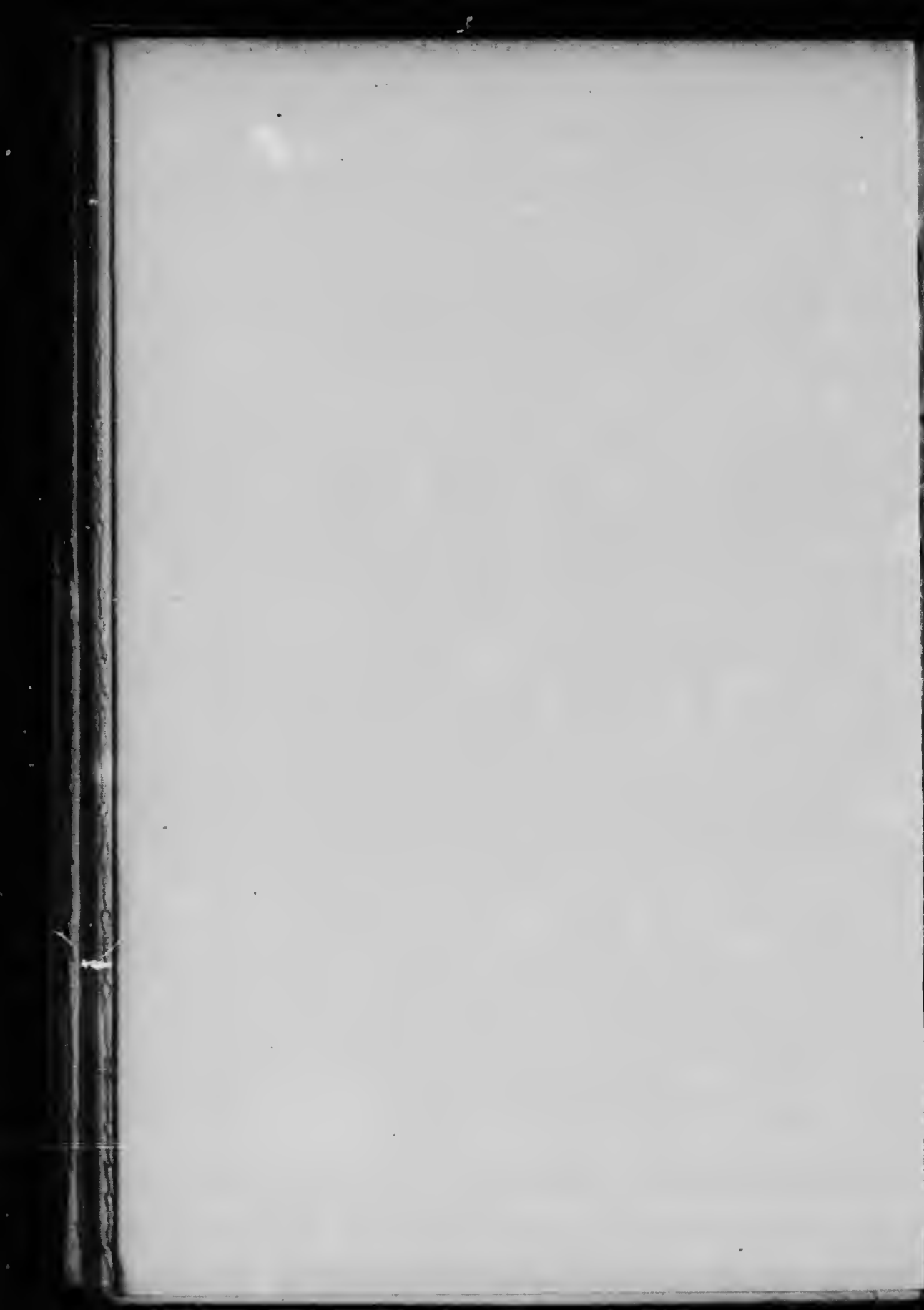
The recollection of that memorable evening has been a green spot in my memory ever since, and of all the people I then met, I am, alas, the sole survivor!"

We frequently went to the theatre, where I saw many of the most celebrated actors of the day: Macready, Phelps, Miss Faucit, Webster, Charles Mathews, and Buckstone, besides which there was a good stock company, amongst whom I recollect Baker, a first-rate comic actor.

When Miss Cushman acted I often went behind the scenes, and I well remember her making up as the old woman in her wonderful performance of Meg Merrilies; her singing of the lullaby to the child, together with her acting, was so perfect and natural that one could scarcely realise she was the Charlotte Cushman so familiar to us off the stage in private life. If her Meg Merrilies was unique, her acting of Romeo to her sister's Juliet, Queen



CHARLOTTE AND SUSAN CUSHMAN AS ROMEO AND JULIET
(SUSAN MARRIED DR. SHERIDAN MUSPRATT)



Catherine, Bianca, in Milman's *Fazio*, and many other characters, was so perfect that in some respects she was the greatest actress of her day.

I went twice to see the French plays, and was much pleased ; all the actors were from the French theatre in London, and the whole affair was excellently got up.

CHAPTER II

IN the spring of 1850, having been six years at Worksop my father decided to send me to Germany to study under Liebig in the small town of Giessen, where my brothers, James Sheridan and Frederic, had been before me, with a view to my entering his business. My brother Richard and his wife being about to pay a visit to the Continent, I accompanied them. We had a rough passage from Hull to Hamburg, and I was very sea-sick, but happily since then, although I have crossed the Channel at least a hundred times, been to the United States, and made several voyages in the Mediterranean, I have never again suffered from *mal de mer*.

First impressions when landing on the Continent were at that time more vivid and interesting than now, the customs, dress, and food being so different from what one saw in England. There still remains the difference in language, but the general mode of life has, at least in those parts near to our country, been assimilated: the large hotels are all much on the same pattern, table d'hôte and restaurants are very similar, and one feels it very monotonous to eat the same dinner and meet the same class of people as in the hotels at home.

Hamburg was a beautiful city, a portion of it being just rebuilt or rebuilding after the fire of 1842, and as a free port, both rich and prosperous, presented a great contrast to some of the older cities, which were the residences of a

large number of great and small dukes and princes, with a population mostly dependent on the Court, living on very small salaries in a state of genteel starvation. The general aspect of and life at these courts is admirably depicted, with little exaggeration, as "Pumpernickel" in *Vanity Fair*.

From Hamburg we went to Berlin by a slow train running about seventeen miles an hour and stopping at every station on the way. Berlin was naturally very interesting to me, as I had read much about Frederick the Great, and Sans Souci, and the city itself with its fine Unter den Linden, Brandenburger Thor, and Thiergarten, made a great impression at first, but we soon tired of its formality and the want of life in the streets, so different from busy Hamburg or London. The theatres and music afforded me great delight, as did also the Krollgarten and other resorts where we took supper and listened to an excellent band.

The dinner hour in the hotels was 12.30 or 1 o'clock, and during my life I have witnessed the change of fashion to 2 o'clock, then to 3, and when it reached 5 o'clock every one thought it would end there, but the last time I was in Berlin the hour for dining was 6.30 or 7 o'clock, or about the same as in England. This change in the hour of dining has had a great influence on the habits of the people in respect to amusement, and on the whole I think it detrimental to the enjoyment of good high class drama, which was more pleasurable at an earlier hour followed by supper.

From Berlin we went to Dresden, then a comparatively small city, but with a lovely situation on the river Elbe, picturesque suburbs, a unique picture gallery, and

excellent theatre. In Liverpool we hardly ever heard an opera, but in Dresden I was so enchanted with the Italian Opera and the singing of Piccolomini that during our short stay we went almost every night, and sometimes to a play, which I was able to follow thanks to my having gained a considerable knowledge of German at school.

We proceeded to the Saxon "Switzerland," seeing the Bastei and Schandau ; and, as my brother and his wife were going on to Prague, I was left to find my way to Giessen as best I could. I left them with a heavy heart, hired a guide to carry my carpet bag, and walked to Königstein about ten miles off, where I caught a train back to Dresden. To raise my spirits I went to the theatre and heard Piccolomini in *Norma*, then returned to the hotel, had supper, and after a good night's rest started at an early hour by train, through Halle, for Eisenach. Owing to the slowness of the train this took up the whole day, passing through the beautiful Thüringerwald, where were many interesting cities.

I spent a day at Eisenach to visit the Wartburg, then a semi-ruined castle—now restored by His Grace the Duke—of world-wide renown as the scene of Luther's traditional conflict with the Devil, when translating the Bible.

To get to Giessen I had first to go to Cassel by rail and then change trains for Marburg. Railway tickets were up to this time usually written slips of paper like the coaching bills, but on the Cassel-Marburg line the English example of a small stamped card—now universal—had been introduced, and this made a great impression on me. In many other respects I found Germany very backward. The letter post was badly organised, and, to send money,

letters had to be registered with a multitude of seals, entailing great expenditure of time.

We English, who had been accustomed to many of these facilities, looked upon the Germans as slow-going people, dreamy, and half-asleep. We knew little and cared less for Germany, not knowing that education was gradually changing the German mind as the Universities had turned their attention to science, which was ignored by Oxford and Cambridge; where even as far as the classical languages were concerned, pedantry had its way, and little progress was made in new learning or advancement, owing to abuses which had crept in under the extension of the College system, to the detriment of the University. Our statesmen and governing classes, who, if educated, had passed through our Public Schools, and Oxford or Cambridge, were unable to recognise or anticipate the enormous advantage Germany would obtain in commerce and industry by means of its higher education; but Cobden, Sir J. Bowring, W. J. Fox, and many Radicals, who were staunch Free Traders, were also educational reformers, and, had their warnings been listened to, England at the present day would not have suffered from the competition of Germany in many industries.

Owing to the liberality of my father, who wished me before entering his business to have the advantage of completing my education at a German University, I was now on my way to Giessen. Although famous throughout the world as a school of chemistry, with its laboratory under the direction of Justus von Liebig, it was difficult of access, as the railway for the North, or Cassel, was only finished to Marburg, and I had to travel

the eighteen miles on to Giessen in what was called a "*Familienwagen*." This was a long omnibus with room for about sixteen or twenty people inside, and, as all the windows were kept closed and most of the passengers smoked short china bowl pipes, travelling was anything but pleasant. The train from Eisenach started about two o'clock in the morning, so that all in the hotel sat up in the public room smoking and drinking. This was too much for me, so I went to bed for a few hours and slept.

At Cassel I was able to get luncheon or dinner in the restaurant, and did not reach Giessen till about four o'clock in the afternoon, putting up at the Hotel Einhorn. This was in the town, but Liebig's house and laboratory were on the Seltersberg, about one and a half miles from the hotel. I found my way there, and was kindly received by Liebig, who had engaged rooms for me in the house of Professor Adrian, forty or fifty yards distant, and I went into them without delay. I found two small uncarpeted rooms; one with a sofa and writing-table, the other about the same size, with German bed and a washing-stand, which together with a couple of chairs in the sitting-room completed the furniture.

Here, in a strange land without any friends, I commenced my University career. For a few weeks I was miserable and regretted my fate, but as I could speak German I soon, by attending lectures and talking with fellow-students, became accustomed and more reconciled to my surroundings.

All amusements were very primitive: in the evenings I went to some gardens where we played skittles, and the days I spent in the Junior Laboratory under Professor

Will. The ordinary dinner hour in the hotel was twelve o'clock, but to accommodate the students who worked in the laboratories a special meal, called the *Chemikeressen*, was arranged for six o'clock in the evening, at the *Rappen*, an hotel, like the *Einhorn*, in the town. This led to a separation of the chemical, from the students in other subjects. In summer, dinner did not last long, and we usually adjourned to some gardens where we drank Rhine wine and natural seltzer water, the most delicious drink for hot weather. In winter we would sit much longer after dinner, talking over the events of the day and of the work done in the laboratory, where many were occupied in original research, their papers being published in the famous *Annalen der Chemie* of Liebig's. In this chemical atmosphere the students learnt more than from any text-book, or attendances at lectures: the absence of other distractions was conducive to study, and I made considerable progress both in science and in conversation in German.

For the first year I hardly spoke a word of English, as there were no English students; there was, however, a solitary Scotchman, Sir Kenneth Mackenzie, who had come to Giessen, accompanied by a Scotch parson, to learn something of chemistry and the German language. He did not mix much with the students, being kept well in hand by his tutor, who would not allow him to associate with men who did not go to church, and who drank too much beer.

I dined every Sunday with Liebig and his family, and frequently spent an evening at his house, when I read German with his beautiful daughter Agnes, who afterwards married Professor Carrière. On Sunday afternoons

we frequently went on a picnic, driving in the omnibus to some pretty spot in the neighbourhood, where we could always obtain refreshment, instead of taking food with us as in England.

In the cool of the evening we would often walk home, and as young ladies generally formed part of the company, I had ample opportunity for talking German on subjects other than chemistry, many of the ladies being well versed in German literature, and fond of English novels, which they had read either in the originals or in translations.

I had arrived at Giessen in May, 1850, and about the end of July or early in August, a Peace Congress met in Frankfurt-on-the-Main. The Congress lasted three days, and Mr. Richards, M.P., Cobden, and others pressed Liebig to attend. He decided to go for one day, and asked if I would like to accompany him, at which of course I was delighted, as I much wished to hear Cobden speak. We put up at the Hotel de Russie, the landlord, Mr. Sarg, being a personal friend of Liebig. We passed most of our leisure time in Sarg's private room, and the conversation naturally referred to the Congress and those attending it. I remember well Sarg's saying to Liebig that there was one thing unheard of in all his experience as an hotel-keeper and caterer—for twenty years he had provided dinners and knew what quantity of each dish would be required, but since the table d'hôte was attended by members of the Congress he had found the puddings always fell short, and he asked Liebig if he could explain it.

In those days a dinner always included a half-bottle of wine in the price, and Liebig asked, "Did the gentlemen drink the wine?" On being told that it was left un-



EDMUND KNOWLES MUSPRATT
Taken at Giessen, 18—(?)

touched, Liebig said: "That accounts for the extra consumption of the puddings." This incident is recorded in Liebig's letters on chemistry, and I distinctly remember the conversation. Of course other peculiarities of the Peace members were also mentioned.

Another recollection dwells in my mind of this occasion. The meetings were held in the Paul's Kirche, and I of course attended to hear the speakers. It was the last day of the Congress, and the chairman announced the business was concluded, and wished to put the resolution, which was in favour of arbitration for all disputes before proceeding to war. There were loud cries for Cobden, who had not intended to speak. As this was the holiday season, many strangers were passing through Frankfurt, and visiting the Paul's Kirche they remained for a time to listen to the proceedings of the Congress. Among others, two Englishmen not at all favourable to the cause of peace, after listening to some fluent rhetoric on the question, jeered and sneered and proposed to leave. Then Cobden began in a conversational tone, saying he had spoken on the two previous days, but as he was always willing to oblige, he would say a few words in support of the resolution. After a few minutes these two Englishmen who had sneered at the whole proceedings said, "What d—d common sense the man does speak." If not convinced, they were unable to answer him, like Sir Robert Peel, who, on one occasion during the debate on the Corn Laws, when urged by his party to reply, said, "You may answer him who can, I cannot."

During the autumn my father, mother, and two sisters passed through Germany on their way to Italy to spend

the winter, and as the University Semester was over and lectures would not be resumed until the end of October, I joined them at Frankfurt.

We visited Heidelberg and Baden-Baden, travelling by rail to Basle, from which point on, as there were no railways in Switzerland and few in Italy, we travelled principally by diligence or vetturino.

Switzerland was already beginning to be the playground of Europe, but mountaineering had not become fashionable, and we went to Lucerne, ascended the Rigi, passed over the Brunig to Interlaken, and visited the glaciers of Grindelwald. The magnificent scenery with the snow-clad mountains of the Bernese Oberland, naturally made a great impression on my mind.

In this leisurely mode of travel one saw much more of the country and its inhabitants than travellers do now, careering from one place to another by train and motor and putting up at hotels where they are placed at tables by themselves, and have little or no intercourse with the natives or with persons of other nationalities. Even in Switzerland, where efforts were first made to provide the English traveller with suitable accommodation, there were only a few large hotels, "Schweitzerhof," at Lucerne, "Three Kings" at Basle, the "Ecu" at Geneva, and "La Couronne" at Vevey. These were owned by the landlord, who himself carried on the hotel, and did everything in his power to please his guests, personally presiding over the table d'hôte. We spent several days on the Lake of Geneva at Vevey, visiting the spots associated with Rousseau, Byron, Shelley, and Gibbon, Voltaire, and Madame de Staël.

From Vevey we hired a vetturino to take us over the

Simplon to Milan, and for two days we passed through the valley of the Rhone (visiting by the way Leuker Bad, where the patients of both sexes pass the whole day in the water reading, gossiping and taking coffee), to Brieg, a small village at the bottom of the Simplon Pass.

The next day we ascended the Pass to the Hospice, where we stayed the night, and were kindly welcomed by the Monks of the same order as those of St. Bernard, with the same breed of dogs. Unfortunately the weather was not very good, and in the cells where we slept it was cold and damp, and there were no fires. The scenery, however, when the clouds lifted, was very fine. The descent into Italy was marred by rain, but on reaching Lago Maggiore it cleared up and we stayed two days at Baveno opposite the Isola Bella.

One day we drove to the Lago d'Orta, a most lovely pass through vineyards, and we could pluck grapes from the hedges. The Val d'Orta is now spoilt by factories, but the lake itself is unspoilt, and the small hotel in the town remains just the same as when I visited it fifty and more years ago, even to the old visitors' book with our names in it.

A striking change, owing to the unity of Italy and progress under the national government, is shown in the difference in the time now taken for this journey compared with then, when each small state had its Custom house, and, to avoid the examination, a tip of ten francs was paid.

Passing one night at Arona and ascending the bronze statue of Carlo Borromeo, we drove to Milan, entering by the arch erected by Napoleon as the termination of his grand road over the Simplon. Here we rested a few

days, and then arranged for another vetturino to carry us to Florence. This took another six or seven days, as we stopped at Lodi, Vicenza, Parma, Ferrara, Modena, and Bologna, then across the Apennines to Florence.

Florence can never lose its charm, with its beautiful situation on the Arno, and its galleries, churches, and historical associations, but often as I have visited it since, I have found something lacking; the old Mercato Vecchia is replaced by the Piazza Vittorio Emanuele; the flower girls in the Cascini who dressed in costume with large Leghorn hats, many very good-looking, and insisting on your buying by placing their flowers in your button-holes, are now no longer to be seen.

The hotels are much the same, some being old palaces; but the society one meets at the table d'hôte is quite changed. Then most of the people who travelled, except the aristocracy, were cultured middle-class people intent on enjoying the artistic treasures and historical associations, and not merely on associating with their own countrymen, playing tennis or golf, and talking the same talk as at home.

This first taste of Italy was delightful to my youthful senses, and I regretted when the time arrived for my return to Giessen to resume my studies. My journey took about six days. I travelled by way of Leghorn to Genoa, arriving early in the morning. After taking a bath and enjoying a good *déjeuner*, accompanied by a *valet de place*, I visited most of the palaces and churches; travelling through the night to Turin, where we passed a day seeing the town; and travelling another night and a day by diligence over the Mont Cenis we came to Geneva, passing through Chambéry, associated with Rousseau and Madame

Waren. From Geneva, on again by diligence to Basle, passing through Lausanne about ten o'clock. Much fatigued by the strenuous sightseeing by day and passing the nights seated, without bed or sofa to rest on, I fell so fast asleep that when I awoke I found myself in the dark, all my fellow-passengers having disappeared, and the diligence standing in a narrow passage, the entrance to the "Hôtel Gibbon." Descending as best I could and feeling my way, I at last heard voices and saw a light in the distance. On entering the room I found all the passengers busy enjoying a good supper, at which I joined them.

At last, after four days and nights' hard travelling, we reached Basle, and the next day took train to Heidelberg, where I stopped a day to see my dear friend, Sam McCulloch, who was studying law at the University, and finally I arrived at Giessen.

On the advice of Baron Liebig, I now took private lessons in mathematics from Doctor Zamminer, Professor of Physics at the University, who lectured specially on optics and acoustics. Having been well grounded at Worksop, I made rapid progress, and became a favourite with the Professor, revelling in the undulating theory of light and double refraction. What delighted me most was that, after wading through long formulae, the result obtained was proved by experiment, and I first thoroughly appreciated how the most abstruse science could be of practical use.

The Professor of Experimental Physics, Professor Buff, was not a mathematician, but a good experimentalist, and a bad lecturer. However I attended his lectures also, and after a year's work divided between these and other

lectures, and work in the junior laboratory under Professor Will, I was taken into the senior laboratory under Liebig himself, and mixed with men doing original work and research.

Fleitman was assistant, Strecker and others assisting in the editing of the *Annalen und Jahresbericht der Chemie*, which appeared every year, containing all the new work in chemistry, including of course that done in the Giessen laboratory.

Work went on the whole day from early morning till evening, with an interval for lunch; in winter consisting of Kalbscotelette and beer at the Felsenkeller, and in summer at a small garden opposite the laboratory, consisting of Dick Milch and cheese, alternating with Pfankuchen and salad. In the garden we had a horizontal bar and parallel bars for gymnastics, which I naturally enjoyed, having practised at school, and I was soon recognised as one of the best "Turners." This, with swimming in the Lahn before breakfast, was practically all the exercise we took, except on Sunday, when we walked to the various places in the neighbourhood.

I spent Christmas with my friend Sam McCulloch in Heidelberg, and returned to Giessen, where, during the winter, I attended the balls at the Museum, where I was introduced to several young ladies, friends of the Liebig's, chiefly daughters of the professors, who expressed their surprise that an Englishman could not only dance the polka and galop, but the German waltz, as well as, if not better than, their other partners. There were only a few days' holidays for Christmas, and then lectures and work in the laboratory were resumed, continuing until Easter. Then, my father and family having spent the winter in

Rome, I joined them to take part in the Easter festivities in the Eternal City. To avoid a long land journey over the Alps, I went by train to Basle and through Geneva to Lyons, where I had to descend the Rhone by steamer. The voyage took two days to Marseilles, which gave me an opportunity of making friends on board. There were two young Englishmen also bound for Rome, and I found one of them a most interesting companion. We discussed literature, both poetry and prose, and were enthusiastic over Macaulay's *Essays*. I found out after a short time that the young man came from Liverpool, and was the son of James Lister, the Manager of the Union Bank, a great friend of my father's. As we continued our journey from Civita Vecchia, we became more and more intimate, and of course when we arrived in Rome I introduced my young friend to my family, who occupied a flat in the Piazza del Popolo.

The first approach to Rome by road (there was then no rail from Civita Vecchia) was much more impressive than it is now by railroad. The Campagna was more desolate, and there were to be seen nothing but a few mounds interspersed by broken aqueducts and other ruins. The life in Rome was much the same as that described by Thackeray in the *Newcomes*. There was a small English colony, which went to balls at Prince Torlonia's and hunted over the Campagna. But the really interesting society was that of the artists and foreigners, and a few well-educated and literary Americans, among them Mrs. Julia Ward Howe, a very remarkable woman, whose death at a great age occurred recently. As I had not anticipated going into society I had left my evening clothes in Giessen, but once or twice when there

was an assembly more interesting than usual, Shakespere Wood, one of the young sculptors studying in Rome, lent me his dress-suit, which fitted me perfectly.

The three weeks or a month which I spent in Rome were full of interest, and in company with my sister Julia, Miss Blagden, and Miss Agassiz, I visited most of the churches and antiquities, also the artists' studios, as my father knew Gibson and Spence, Shakespere Wood, a German painter named Turner, Crawford, an American sculptor, who was then engaged on a monument to Washington to be cast in bronze in Munich, and other artists, including Penry Williams.

The Café Greco was a great rendezvous of the artists, and I frequently took coffee there. It was a great source of amusement to visit the studios and pass an hour or so chatting with the artists. Benjamin Spence, a pupil of Gibson, made a most admirable bust of my mother, and a small statue of Lavinia for my father. Saulini the cameo engraver also made some portraits of my family, and beautiful figures, mostly subjects of Greek and Roman Mythology.

The time passed very quickly, and I had to depart to take up my studies again at Giessen. Of course before starting we all made a last visit to the Coliseum by moonlight, and drank the water at the Fontana de Trevi.

I travelled back to Frankfurt with my family, passing over the St. Gothard in sledges. Lever gives a most amusing description of this mode of travelling over the Alps in his *The Dodd Family Abroad*.

I arrived at Giessen rather late, but there were still two months left of the Semester, which passed quickly, and everyone began to talk of the Great Exhibition in

London. Everyone who could afford it determined to go, and many of my fellow-students arranged to meet in London on a certain day in August, under the transept of the Crystal Palace in Hyde Park. I, of course, after passing a few days in London, went home, and most of the celebrated foreign chemists came to Liverpool to see my father.

CHAPTER III

THERE was at that time great rivalry between the Cunard and the Collins Lines, and the steamers, as they passed our house coming up the Channel, fired a gun. A rather amusing scene occurred; Ballard, the discoverer of bromine, Liebig, and some others were dining with us, and the conversation turned on the wonder of transatlantic steamers keeping such excellent time. My brother said, "One is now due," and at that moment the gun fired, announcing the arrival of the Cunarder. This so much struck our foreign guests that it was gravely announced in many scientific circles, that so perfect had the service become that the steamers were as punctual as railway trains. One does not realise to-day the excitement caused by the steamers to America and the great progress of invention, particularly in that country. *Punch* published the following lines, which rather disgusted English readers, à propos of the defeat of the English yacht by the *America* :—

"A steamer too, of Collins Line,
A Yankee Doodle notion,
Has been and quickest crossed the brine
Of the Atlantic Ocean.

Both Chubbs and Bramah, Hobbs has picked,
And now we must be viewed all
As having been completely licked
By glorious Yankee Doodle."

The terrible Irish famine led to discussions as to the cause of the potato disease, and Liebig had been consulted on the subject. As he expressed a desire to visit Ireland, my father arranged a small party consisting of Samuel Lover, Michael J. Whitty (editor of the *Liverpool Journal* and founder of the *Liverpool Daily Post*), Mr. Fincham (manager of the British Plate Glass Company, St. Helens), the latter a very intelligent man familiar with political economy, to accompany him and Liebig to Ireland, and I joined the party. The visit was extremely interesting, and Whitty published an account in the *Liverpool Journal*. Unfortunately I have not been able to obtain a copy, as there was not one to be found, even in the *Daily Post* office.

There were frequent discussions on a variety of subjects, and on what remedies could be found for the improvement of the state of that unfortunate country. Sir Robert Kane, a former student of Liebig's, had published a pamphlet on the Industrial Resources of Ireland. Sir R. Kane was principal of the new University College of Cork, but as he was absent from that city, we did not visit it, but went direct to Galway to see Connemara, the poorest part of Ireland, where the landlords' system had broken down, and the large Martin estates were either sold or for sale.

There was no railway further than Athlone, so we had to avail ourselves of the Bianconi public cars, and had the pleasure of using this pioneer mode of travel instead of the English stage coach. These cars travelled at the rate of eight or ten miles an hour, and however much they might suit Irishmen who were accustomed to the outside Irish car, Englishmen and foreigners found them very tiring, and difficult to prevent falling off when going at

a high speed, so after a long day's journey we sought another mode of conveyance, and had to put up with a couple of post-chaises. A journey in a post-chaise, though lauded by Dr. Johnson and "Pickwick" as the most desirable mode of travel, did not improve matters for us, those we obtained having doors off their hinges and the bottoms broken.

At this distance of time I can barely recall the interesting conversation during the trip. Lover, the author of *Handy Andy*, was full of anecdotes, and we had many lively stories and combats of wit between him and some of the waiters and ostlers we met in the far West of Ireland. There was one serious discussion which I recall distinctly. One of the party, I think, Whitty, pronounced the word "theory" as Liebig did, but used the term as opposed to practice, and in fact inimical to progress in industry. Liebig combated this idea, and maintained that there was, and could be, no antagonism between theory and practice if properly understood, as "theory" meant an explanation of facts. The literary authorities present seemed to think it ridiculous for a foreigner to define the meaning of an English word, and so for a time ended the dispute.

When we arrived in Galway, we visited the New College, where Hardiman, the great Irish scholar, was principal, and Ronalds, a pupil of Liebig, Professor of Chemistry, who formerly taught chemistry at Worksop. We went over the whole of the buildings, including the Library, where, on a table, Liebig saw a fine copy of Webster's Dictionary. He naturally turned to the word "theory," and found, to his delight, that Webster supported his definition of the word—"an explanation of facts."

Having called Whitty and Lover's attention to the dictionary, they were obliged to confess their error, and that the foreigner was right.

The scenery in Connemara is very fine and the bays very picturesque, and Lover, with the eye of an artist, drew our attention to the most beautiful views, and the strikingly interesting girls with their picturesque costumes and red petticoats. These young girls are beautiful, with features which denote the admixture of Spanish blood, derived from the time when Galway and the South of Ireland had a large and lucrative trade with the Peninsula and Mediterranean, all destroyed by the English rule, the destruction being completed by the Union. Under Home Rule much of this prosperity may revive.

We returned to Dublin, to visit County Wicklow, and then came back to Liverpool.

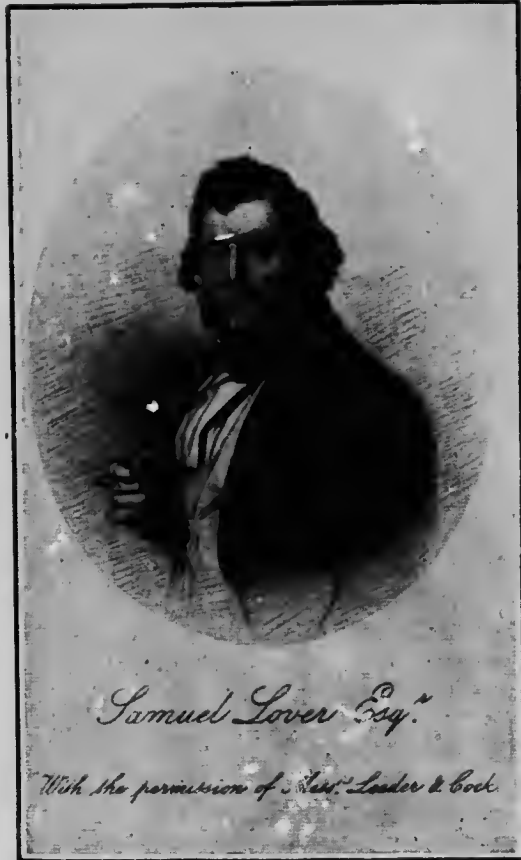
Michael James Whitty was born in Ireland in 1795. He was a journalist, editing the *London and Dublin Magazine* in 1823 to 1827, and edited the *Liverpool Journal* in 1830 to 1836, becoming its proprietor in 1848. When a committee was appointed to enquire into the effect of the duties on paper and advertisements, usually called taxes on knowledge, Whitty, in giving evidence, said that if they were repealed he would publish a daily paper at the price of one penny, the usual price ranging from threepence to sixpence. On the repeal of these taxes he brought out in 1855 the *Liverpool Daily Post*, the first penny daily paper published in the United Kingdom.

The other Liverpool newspapers were now also reduced to a penny, which made the competition very severe, as

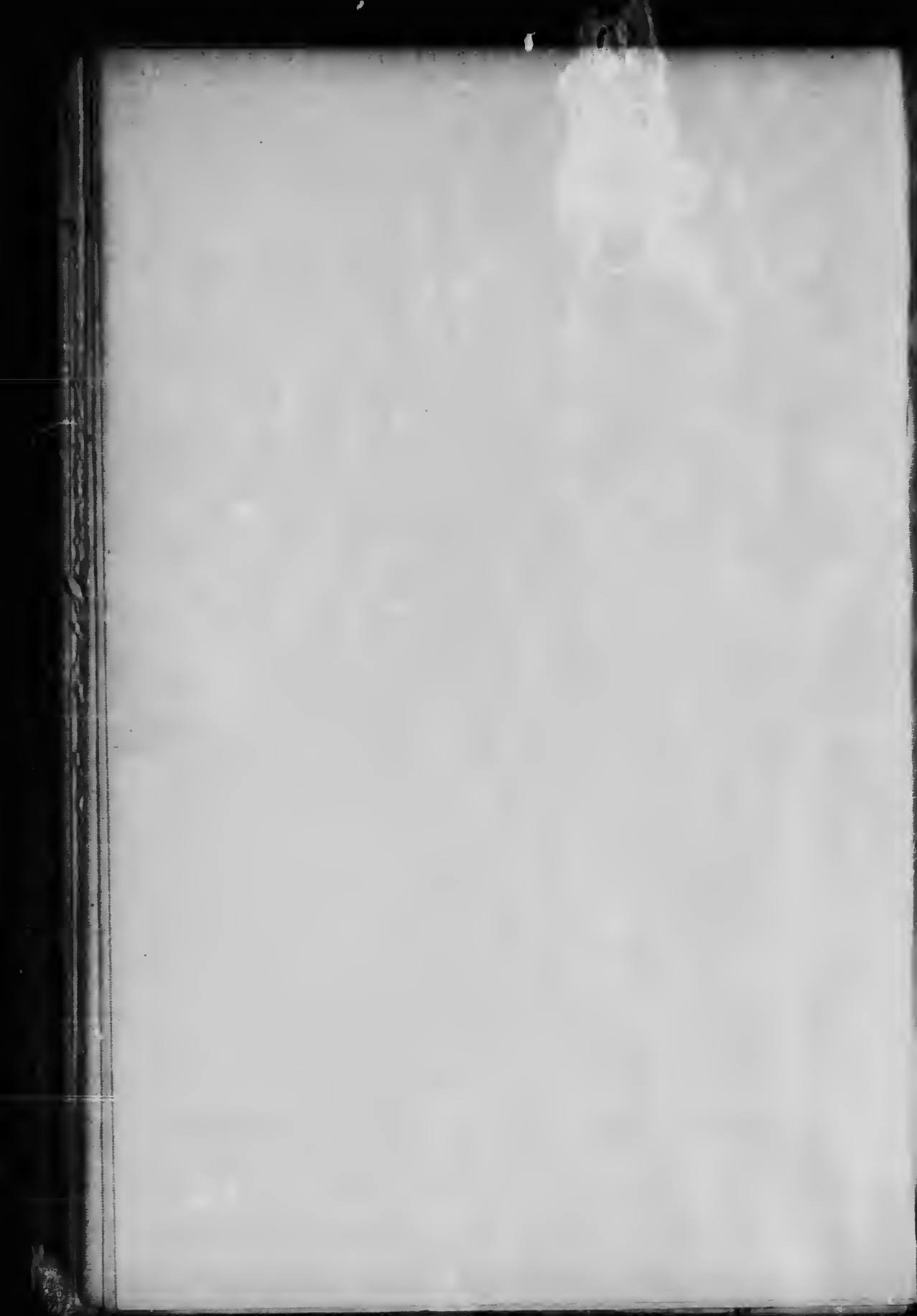
there were two Liberal newspapers and only one Conservative in a town politically Tory.

The difficulties were increased by the commencement of the Civil War in the United States, as Whitty boldly took the side of the Federal Government, when the governing classes in England, and the majority of commercial men in Liverpool, espoused the cause of the South owing to the scarcity of cotton. Curiously enough, this had very little effect on the sale of the paper, and shows that the mass of the peop' took a different view from that of the wealthier classes.

Samuel Lover, born in 1797, was also one of my father's oldest friends and frequently came to visit him at Seaforth. Like his countryman, Thomas Moore, he wrote songs which he himself set to music and sang, and although he had very little voice they were very enjoyable owing to his humorous and dramatic rendering. They are not very familiar to the present generation, but for about fifty years were constantly heard in drawing-rooms and at concerts. The best known are "Rory O'More," "The Four-leaved Shamrock," "The Angel's Whisper," and "The Low-backed Car." He also wrote novels and *Legends and Stories of Ireland*, which he illustrated himself. As a painter he applied himself especially to miniature painting, at that time fashionable, and became secretary to the Royal Hibernian Academy in 1830. He removed to London about 1835, hoping to secure a larger clientele. There he painted a beautiful miniature of Paganini and was so pleased with it that he would not part with it during his life, and when his effects were sold after his death, in 1868, I purchased this and a few others of great excellence,



From a stipple engraving



which I still possess. With the advent of photography, miniature portraits became less fashionable, and Lover commenced giving entertainments called "Irish Evenings," which for some time were well attended, and at which he was frequently assisted by other artists in singing his songs. He also gave these same entertainments in the United States and Canada, where they were successful and proved very lucrative.

Unfortunately the weather during our visit to Ireland was wet, and Liebig felt the effects of the climate and rough travelling, but in later years he always spoke of this time as most interesting and instructive.

From Seaforth he went to Balmoral on a visit to the Queen and Prince Albert, who took a great interest in the progress of science, particularly that of chemistry. He had, moreover, found an able assistant in carrying out his great project of the International Exhibition in Lyon Playfair, a former student of Liebig's in Giessen. The quarters in Balmoral were very primitive at that time, and the present castle had not been built; but Liebig was fascinated by the kindness of the Queen, and the beauty of the Marchioness of Douro, who was in attendance.

About the end of October I returned to Giessen, and later spent Christmas with Liebig's family, and received a glass "Schopper" as a present, which I still possess. There was, of course, a Christmas-tree, upon which were hung small presents for each of the family, and small biscuits called "vanillebackenes."

During the Whitsuntide holidays I visited Lille in company with Hermann Liebig, the second son of the Professor. Liebig and Kuhlmann, the French chemist,

were very intimate friends, and owing to an introduction from Liebig, my family also became very intimate with the Kuhlmann family. I frequently visited Lille in after years, and had the good fortune of learning something of French family life, and acquired great facility for talking French.

Kuhlmann was by birth an Alsatian, and came to Lille as a scientific chemist attached to the Academy, giving lectures on chemistry. Then he started the manufacture of chemicals, principally sulphuric and hydrochloric acids and bleaching liquor, for which Lille furnished a good market. This gradually developed into the large Fabrique des Produits Chimiques du Nord, one of the largest chemical manufactories in France. At the time of my visit in 1852, Kuhlmann's factory at Lille employed some three or four hundred workmen, and at Whitsuntide they had a grand entertainment, where the men and their wives were feasted, the whole family and their friends serving, while in the evening there were fireworks in the garden which surrounded the factory. In the small house which the family occupied during the summer months, I spent many happy days, and was treated as one of the family.

This was not my first visit: earlier, in the previous year, I had passed through Lille on my way to Paris, where I spent about a month during the Easter vacation.

That first visit to Paris was very enjoyable, as I spent it chiefly with the students in the Latin Quarter. I frequently went to the theatre, but at first had difficulty in following the brilliant text of *La Dame aux Camélias*, which was acted at the Vaudeville with the original cast. Madame Doche took the principal part with Fechter as

Armand Duval. I got a book of the words, which I read through the next morning, and went a second and third time to see the play; by this time my ear had been trained, and I followed every word without the book, and from that time was able to take part in the lively conversation during dinner at Lille, and enjoy the wonderful acting of the French in both tragedy and comedy. Rachel I saw at the Comédie Française; Ravel, Levasseur, Le Maître, Lafont, at the Palais Royal; but in my opinion none of the actors and actresses were superior to Madame Doche and Fechter in *La Dame aux Camélias*.

As my allowance while at Giessen was only £120 a year, with a few pounds extra when I travelled, I had little money to spend in Paris, but I think what I spent on theatres was well repaid by my improvement in speaking French. Of course I visited all the usual sights, and so far as the appearance of Paris went, its contrast with the gloom of London was very great. The Haussmann improvements had only just begun, and the Boulevards des Italiens was the great centre of Paris life. The old cafés and restaurants were famous all over the world—the Café Anglais, Tortoni for ices, Vachettes for *déjeuner*, all in the Boulevards, with Trois Frères Provençaux, and Véfours, in the Palais Royal, and the Café Rotond in the garden, where the best and cheapest coffee was served.

I may have something more to say of Paris when I come to my later visits to that delightful and beautiful city, which still has a charm of its own, in spite of the enormous influx of English and American visitors which has tended to vulgarise it.

On my return to Giessen in 1852 a change was made

in my course of studies. Professor Liebig was anxious that I should in after life devote myself to, or specialise in physiological chemistry, and as a preparation advised me to follow the medical course. I therefore attended the lectures of Professor Bischoff on Physiology, and Leuckart on Natural History or Zoology, in addition to chemical and other lectures. My time was therefore fully occupied, and in a small town there were few distractions, a great advantage over a large town; here also the students came into more immediate contact with the Professors. But a change was imminent.

When I first arrived at Giessen, Professor Liebig, who was only about fifty or fifty-one years of age, appeared an old and broken-down man. When he entered the lecture-room he could hardly walk firmly, but glided in and appeared exhausted with the effort. In a few minutes all was changed, when he became inspired by the subject of his lecture.

After refusing many other offers, and a specially favourable one from Vienna, he finally agreed to accept a Professorship at Munich, stipulating, however, that he should not be required to teach, and that a laboratory should be built for the accommodation of a small number of students, and a private laboratory for himself. In connection with the laboratory a lecture-hall was built, the whole building forming an extensive dwelling-house, with ample accommodation for his family. When we consider the strenuous work in which Liebig had been engaged, and the effect upon his health, the removal from Giessen was a wise decision, and probably added many years to his life.

As I was now studying medicine, and did not work in

the chemical laboratory, I followed the Professor to Munich, and my father and mother, with my sister Emma, came to spend the winter, taking a flat in the Fürsten Strasse.

The social and home life of Liebig and his family was entirely changed, and of course my associations with them. In Giessen, as I have said, there were few amusements, only a few balls and picnics, no theatres or concerts, and, as most of the Professors had very small incomes, there were very few private parties. Liebig, for the first year, was busy installing his family in their new home, and organising his scientific work. He came at least twice a week to spend the evening with us, playing whist, and talking with my father, whose company he greatly enjoyed. Sometimes he would ask my sister and me to join him at the theatre, where there was an admirable company of actors and singers. Under the Intendant Dinglestedt, the theatre was well managed, and all the best plays of the German stage, with Shakespeare and Molière in excellent translations, were produced.

The winter passed quickly, and I attended the clinical lectures of Dr. Pfeufer, and walked the hospitals. I also studied anatomy and attended the dissecting-rooms. In the spring my father and mother took a trip to the Italian Lakes, with my sister and Liebig's second daughter Nanny. They travelled by vetturino over the Val d'Ampezzo to Verona. On their return to England my father and mother left my sister in Munich as a guest of Liebig. I took lodgings in the Karlstrasse, and attended diligently to my studies. Naturally I was a frequent guest at Liebig's house, dining there every Sunday and often staying for supper.

The next house to Liebig's, only separated by a garden, was that of Professor Thiersch, the celebrated Greek scholar, who accompanied King Otto to Athens, and founded the University there. This proximity led to great intimacy between the two families, and Thiersch's son Karl, who was Prosektor of the University, later married, in 1855, Liebig's daughter Nanny. At Thiersch's house there was an open evening on Sundays, which I attended with my sister and the Liebig family. Here we met many artists and art students, also daughters of other Professors at the University.

This is perhaps the best place to record the action of King Maximilian, which resulted in bringing together a most remarkable society, and consequently during the time I was a student in Munich I enjoyed the advantages of familiar intercourse with many of the greatest men of Science, Art, Philosophy, and Literature, in Germany. King Maximilian, when a young man, had studied in Berlin and succeeded his father King Ludwig, who had done very much for the artistic development of Bavaria but little to further science or industry. The Bavarian capital was much behind the rest of Germany in general culture, and the Ultramontanes, who were the ruling power, had forced his father, King Ludwig, to abdicate in 1848. King Ludwig had a great penchant for Lola Montez, the famous beauty and dancer, whom he created Countess of Lansfeldt, placing her portrait in a gallery of beautiful women, amongst whom was the wife of the English Minister at Munich. On one occasion, at a ball, old King Ludwig remarked to my sister Emma that she bore a strong resemblance to the famous dancer. Berlin and the Royal Family were Protestants, and

Prince Maximilian married Marie, one of the Prussian Royal Family. In Berlin, Herr von Dönniges acted as tutor and secretary to the Prince. When called to the throne in 1848, he brought Dönniges to Munich, and gradually attracted to the Bavarian capital, such men as the poets Geibel, Bodenstedt, and Paul Heyse, Dinglestedt (afterwards Intendant at the theatre), and the historians von Sybel and Riehl; all North Germans. Amongst scientists, of course, the greatest was Liebig; Kaulbach and Thiersch were already in Munich, but Bischopf, Riehl, Joly, Bluntschli, Knapp, Harness, and others, were brought from North Germany to fill Chairs in the University of Munich, which in many respects was far behind other universities in Germany.

The influence of these men gradually undermined some of the influence of the Ultramontanes, and contributed largely to the emancipation of the government and people from the reactionary policy of Metternich and Austria, leading finally to the adhesion of Bavaria to the North German Confederation, and the foundation of a united Germany, by the Franco-German war of 1870.

These "foreigners," as they were called by the old Bavarians, naturally formed a society of their own, which welcomed the presence of all distinguished men of all countries who visited Munich, and they were joined by many of the more liberal and open-minded of the older Professors of the University. Among these the most distinguished was Franz von Kobell, one of the first mineralogists, but with literary gifts which found vent in most admirable verses in the Bavarian and Palatine

dialects. He himself talked broad Bavarian, and this dialect was used even among educated men at that period, and was not easily understood by North Germans. As a consequence of their desire for social intercourse, there were open evenings at Dönniges', Thiersch's, and Liebig's, which were most enjoyable.

The conversation was very lively and interesting on the theatre, literature, and science. Now and then one of the poets would read his latest poem, musicians would play, and Frau-Dinglestedt, a former Prima Donna, would sing. There was no stiffness, and when a number of young people were present, there was dancing. It is very unlikely that a similar social circle will be gathered together again, as the conditions were unique.

At Dönniges' "Wednesday" evenings there frequently appeared his daughter, a young girl of about twelve years old, very precocious for her age, and able to appreciate the literary conversation and reading, which generally occupied a portion of the evening. Her after career is now familiar to many English readers by the publication in English of her autobiography. Her relations with Lassalle appeared in the form of a novel by Meredith, which came out in the *Fortnightly Review* under the title of the "Tragic Comedians," but with no acknowledgment of the source from which it was taken. To my astonishment, on reading the first chapters, I guessed that the heroine was the young girl I had met in Munich years before, and I ordered from Germany a book published by her entitled *Meine Beziehungen mit Ferdinand Lassalle*. The novel was, to a very great extent, a mere translation of this book, and really showed that sometimes truth was

stranger and more interesting than fiction. When republished in book form, the acknowledgment was made that it was based on Hélène's own account of her relations with the great socialist leader.

At Liebig's house, besides more formal meetings, many interesting people came to visit him or the family. He played whist nearly every evening with Pfeufer, Dinglestedt, von Sybel or Riehl, and these evenings are pleasantly referred to in Dinglestedt's *Münchener Bilderbogen*. There assembled, he says, "a tall man, a stout man, and a great man." I was the tall man, Pfeufer the "dicker Mensch," and Liebig the great man. There was no lack of conversation among us young people who assembled in a large round room with a fine palm tree in the centre. Frequently we came back from the theatre to partake of supper, when we were joined by the whist-players.

A great attraction in Liebig's house, were his two daughters, Agnes the elder, and Nanny the second; Marie the youngest, was only a girl, or "Backfisch," and usually did not appear. Both the elder ones were very beautiful, and attracted the artists. Agnes was blonde, and Nanny dark, forming a great contrast. Kaulbach, at that time the head of the Munich school of artists, painted a beautiful portrait of Nanny. Agnes, soon after coming to Munich, married Moritz Carrière, who had been brought from Giessen to fill a Chair of Æsthetics at the University. He was a good art and dramatic critic, and to those who got intimate with him, a most interesting companion.

Of course through Carrière and Dinglestedt we learned much of the state of the theatre in Germany and Munich,

and during the time I was there I saw most of the great actors of Germany, among others, Emil Devrient and Davison; Fräulein Dambock, a fine tragic actress, and Frau Hausman, and other highly excellent comedians were permanently engaged.

CHAPTER IV

IN the autumn vacation I accompanied my brother Frederic on a journey to Spain. We met in Paris in the month of August, 1853, and as the weather was very hot we hastened towards the Pyrenees, and reached Pau, but quickly left for Eaux Bonnes and the high mountains.

The journey was full of interest, and I regret very much that I kept no diary, as I have frequently been asked to write an account of our adventures in Spain. I can only refresh my memory by the perusal of two letters which I wrote to my sister Emma, but much of the freshness and many of the vivid impressions have evaporated during the fifty-eight years which have elapsed.

PAU, BASSES PYRÉNÉES,

20th August, 1853.

DEAR EMMA,

You will see that we are in the Basses Pyrénées in the South of France, and we go on to Spain by the highest and most difficult pass of the mountains, most likely on mules, perhaps on foot.

Murray says the villages are inhabited by wild beasts and smugglers, pleasant companions!

On the way I shall keep a journal and shall write you and the Professor from Saragossa, if I have time, if not from Madrid, where we shall most likely be in ten days.

We intend staying there a fortnight, so that if you write by return, I shall get your letter.

As yet we have not passed through any fine country. We were a day in Bordeaux, a very fine town, the second seaport of France. The streets are wide and good, but after Paris it is very dull, although there are more people in the streets than in Munich.

As I have not time at present to say more, I must conclude.

SARAGOSSA,

30th August, 1853.

MY DEAR EMMA,

I wrote you in my note from Pau that I should most likely write you a description of my adventures from Saragossa, and as there is no use writing often, I shall write this letter like a diary, and may perhaps finish it in Madrid.

First, from Pau we proceeded to the Eaux Bonnes, another watering-place in the Basses Pyrénées, but more in the mountains than Pau. It is, however, a very stupid place, although the scenery around is very fine.

We left Eaux Bonnes on Monday the 23rd instant at five o'clock in the morning, on horseback, and rode up the hills through the Col de Torda, descended into the valley, and then over on the high road, to Luz.

The view from the top of the Col is very fine; a valley is seen on either side, and the rocks are very bold and craggy at the top, but the bottom is mostly covered with trees. We descended by a most extraordinary path, which was very steep and seemed impossible to accomplish on horseback, but the animals were very sure-footed, and we reached the bottom in safety. We then went over another Col, called Col de Litorde, from the top of which is another very fine view into two valleys, but quite different from one another. The valley we had passed

through was very grand and bold, nearly sheltered from the sun by the mountains; the other exceedingly fertile and picturesque.

In this latter is situated a small village where we breakfasted, after having ridden five hours, so you may imagine that we were rather hungry!

In the evening we arrived at Lu., where we slept.

"Tuesday, 24th. We rode on to Gavarni by the valley of Lavedan, which is magnificent. Through the valley flows the river Gar, sometimes in a ravine 200 feet deep, the rocks on the other side being nearly perpendicular and above 400 feet high; every now and then a waterfall appears in view, gushing through the rocks and falling into the river. Another part of the road has received the appropriate name of Chaos, for indeed chaos reigns here again. The whole side of the mountains is covered with large blocks of stone; the river filled with the same, over which the water gushes with fearful rapidity.

The next place we reached was Gavarni, but we rode on for another hour in order to see the cascade which falls from what is called the Cirque de Gavarni. It is very fine, and not like any other waterfall I have seen. The place is nearly shut out from the sun, and the rocks form, as it were, a hollow cylinder, down the sides of which six or seven waterfalls descend. The tops of the mountains are covered with snow, the Marbore', the third highest mountain of the Pyrenees, forming one of the sides of the cylinder."

After visiting the waterfalls we returned to the small inn, almost the only building in that desolate spot. We, however, were served with an excellent supper, and over a large log fire I conversed with the landlady, who gave gruesome accounts of the winter, as wolves were very

numerous, and played havoc with the sheep and poultry. She was very much surprised to hear that we had no wolves in England, and I told her how they had been exterminated hundreds of years ago by a prize being offered by the King for the head of each wolf killed.

The next morning we started early to pass into Spain by the highest pass in the Pyrenees, called the Brèche de Roland, from the legend that Roland split the rocks in two with his sword, thus forming the road leading from France into Spain.

“Wednesday, 25th. We rode over the mountains into Spain, and had a magnificent view of the Marbore'. The pass into Spain is very high, I should say about 8000 feet, as we passed through some snow.

The first village we came to on the Spanish side was Bujarels, a village of three houses, where we took breakfast, which was not very good. After breakfast we rode on to Torla, a small villa, where we passed the night.

The scenery between Bujarels and Torla is magnificent; we passed by the so-called Robber Pass, accompanied by a carabbiniero. It is a very narrow pass between the rocks, which are nearly perpendicular, and at the bottom they are covered with trees, so that there are plenty of places for the Banditti to hide themselves.

On emerging from the pass the rocks on the one side assumed a very grand aspect, they are nearly perpendicular and at the top they appeared like a large wall or fortress, and put me in mind of Ehrenbreitstein, but on a far grander scale. We rode on for several hours without seeing a living being, when suddenly, from behind some rocks men armed with muskets appeared. At first we thought they were banditti, but as we had no pistols we left ourselves in their hands, hoping not to lose more than the few silver francs we had in coin.

We were soon reassured, on finding they were customs officers, who searched our small luggage (all the heavy luggage having been sent on to Madrid), as they thought we were contrabandisti or smugglers, but on giving them a trifle they allowed us to proceed on our journey over the most infernal roads in the world, and we rode about thirty miles each day under a blazing sun, until I became as red as a turkey-cock, and Fred, if possible, worse. The scenery in some parts was very fine, but we were generally so sore in the evenings that we could not always enjoy it, in fact I would rather ride one hundred miles on a horse with a saddle, than twenty on a mule without one.

The roads, as I said before, were infernal, one time it was a perpetual *getting up stairs*, then a getting down stairs again, so that we were one time nearly over the neck, at another nearly over the tail, of the mule, and you must remember that "stairs" is not used figuratively, but they were stairs in reality, and both Fred and I feel competent to perform in any circus now.

Later in the evening we halted at a small village, where we found shelter in a posada, and slept in the same room as the landlord, his wife, a son and a daughter, so you may imagine that we were pretty far from a civilised country."

We soon found we were in Spain, for there was difficulty in making our wants known, and we were served with some tough chicken, coarse, hard-baked bread full of sand from the millstones, very different from the fare at Gavarni.

Next day, as we could not get horses, we had to put up with two mules, without saddle or bridle, only a halter over the head of the animal, and a sack over its back, with a man as a guide who only spoke a Spanish patois utterly incomprehensible.

The journey to the next village took ten hours or more. For food on the way we each ate about ten hard-boiled eggs and hard bread. Fruit could not be had in this desolate country. The next day we reached Huesca, after a tiring ride through some of the finest scenery of the Pyrenees, surrounded by mountains from ten to eleven thousand feet high, called the "Three Sisters." For a description of our stay in Huesca, I extract from a letter written to my sister Emma.

"On Friday evening we arrived at Huesca, a small town, where we stayed two days waiting for the diligence, and amused ourselves with learning Spanish and talking to the servant, who did not understand a word we said, and she also spoke a patois which we could not understand. It was difficult to make ourselves understood, even with the aid of a dictionary. For example, we asked for eggs and they brought us grapes, and for meat they served us with scraggy bones of sheep or goat, we could not distinguish; but at last finding 'omelet' in the dictionary to be in Spanish 'tortilla,' and on going into the kitchen to assist in the demonstration of what we desired, we obtained sufficient edible food to satisfy our hunger. We left on Monday morning at 2 o'clock in the diligence for Saragossa, arriving there about eleven o'clock. The road was most dreadfully bad, and we rocked about far worse than in a vessel at sea. Tuesday and Wednesday we remained in Saragossa and visited the town. On the whole there is not much worth seeing, but it must have been a very fine city before the sieges, and it is indeed wonderful that so much is left of it. It contains two cathedrals, the one dedicated to the Virgin and is called 'El Pila,' on which the Virgin is said to have descended from heaven. The style of architecture is different from any I have as yet seen, and before all the chapels there

are magnificent gateways. We next saw the citadel, an old Moorish building, but much restored; in it is a room erected in 1492, the date of the discovery of the New World, and the ceiling is decorated with the first gold that was brought from it.

In the town itself are many other old buildings, which have an Oriental appearance, and are curious.

Before the citadel is the wall where the Maid of Saragossa seized a lighted torch from a dying artilleryman's hand and fired on the French. For a description of this heroic deed see Byron's *Childe Harold*, Canto I. You will perhaps remember an engraving of it after Wilkie in the breakfast parlour at Seaforth.

Thursday evening we left Saragossa in a diligence for Madrid, and arrived here on Friday morning after a twenty-six hours' drive, very tired, but a bath put us all right, and we propose seeing Madrid and Luna to-day, Saturday. To-morrow is to be a bull-fight, which we intend going to see."

CADIZ,

Oct. 14th, 1853.

I believe I left off in my last letter when I had reached Madrid. We did not see Luna for more than a week after we arrived, as he was in the country.

There is little worth seeing in Madrid except the Museum, the gallery of pictures, which is one of the finest in the world. We generally went to the gallery in the morning, and in the afternoon took a Spanish lesson, i.e. we read *Don Quixote*; in the evenings we walked in the Prado, where all the people take their evening walk, but it is a very dull way of amusing oneself.

In the museum there are some splendid pictures of each great Master; the best are by Velasquez and Murillo of the Spanish Masters, and of Titian, Raphael and Teniers

of the foreign schools. Velasquez is only to be seen in Madrid, as nearly all his good paintings are there.

Except for the museum, as I have said, Madrid is a stupid town. There is a fine royal Armoury, containing the swords and suits of armour which belonged to Columbus, Cortes, Charles V, etc. The collection of swords is the finest in the world. The town is clean, and like any other European town, with nothing peculiar except the bull-fights. We saw one, and I shall try to give you a description of it, but you ought to read the description of one by Byron in his *Childe Harold*, as it is very true.

The Plaza del Toros is something like a Roman amphitheatre, but not so large, it holds, however, about 20,000 spectators. At first all the matadores, picadores, etc., pass through the arena in procession, which has a very picturesque effect. The arena is then cleared, and only the four picadores on horseback and some boys with scarves to attract the attention of the bull, are left. The doors are then opened, and the bull rushes at one horse after the other, sometimes ripping up the stomach until all the entrails hang out.

When this butchery has lasted about ten minutes, a trumpet sounds and some men with knives run into the arena and stick them into the bull, to make him more furious; but it is rather a pretty scene, as it requires great skill. When this has lasted some time, the matadore comes in, armed with a sword which he hides underneath a red scarf, and when the bull approaches him he sticks his sword through the bull's neck, and generally kills him. Amidst the applause of the people and the waving of handkerchiefs by the ladies, he is drawn off by nine horses. We saw eight bulls and ten horses killed.

We left Madrid for Aranjuez, where we saw the gardens, and then went on to Toledo, a fine old town situated on seven hills, like Rome, and containing many relics of the

Moors and Goths ; the Tagus nearly encircles it. From Toledo we rode on horses to Talavera, about fifty miles. We waited a day there for a diligence which took us to Trujillo, where we had to wait again two days to get on to Merida, now a small town of four thousand inhabitants, but it was formerly the Roman capital of the North of Spain, and contained over two hundred thousand people.

There are many Roman remains, two bridges, two aqueducts, an amphitheatre, theatre, and Circus Maximus. The aqueduct is splendid, there are thirty-seven shafts remaining, 90 feet high each, and most beautifully built, with seven tiers of arches. One of the bridges is three-quarters of a mile long, and the other has still the original pavement, in spite of the traffic of seventeen centuries.

Merida was founded about forty years before Christ, by a Roman Praetor, and under Trajan became a great town. The Goths who possessed it afterwards improved it, then the Moors took it and also improved it more, but since the Spaniards have had it it has dwindled down and lost all its greatness. The Spanish government ruins everything, and the only things in Spain worth seeing except the cathedrals are the remains of the Moors and the Romans, two great nations.

From Merida we went by diligence to Badajoz, and from Badajoz to Cadiz.

Diligence travelling is much more exciting in Spain than in other parts of Europe, partly on account of the badness of the roads, and also of the use of mules instead of horses. There are usually five mules and one horse ; the horse is ridden by a postilion, and together with the mule alongside, forms the leader. The driver of the other mules sits in front of the diligence, accompanied by a boy. He has no whip, but several sticks under the seat. He constantly urges forward the animals by continuous cries

of "anda mula, anda mula," and if it has no effect in quickening the pace, the boy jumps off the seat, seizes a stick and belabours the animal until the stick is broken.

On the bridge at Merida we stuck fast in a hole, and I don't remember how many sticks were broken over the backs of the mules, before with our help at the wheels the vehicle was got out of the hole and we proceeded on our journey. The small postilion riding the horse is called "Condemnato al Moerto," "condemned to death," as they all die young, owing to hard and strenuous work. One of them is said to have ridden from the North to the South of Spain for a wager, without stopping to rest except in the daytime for meals. They frequently fall asleep on the horse when the road is level and straight and in good order, but we witnessed the same boy riding the whole way from Saragossa to Madrid, with only an hour's interval, when he climbed to the top of the diligence and fell asleep.

From Badajoz we continued without further adventures to Seville—"a very pleasant town and with many interesting Moorish remains. The cathedral is magnificent, nearly as large as Cologne, and is built in all styles of architecture, from the Moorish down to the present Spanish. The Alcazar, or old Moorish palace, is also very fine, and some say, even finer than the Alhambra, but it can scarcely be described, and I never thought Moorish architecture so fine until I saw it.

In the Caridad Museo and University there are pictures of the Seville school, and there Murillo is to be seen in all his glory. We also saw Casa Pilatus, said to be built in imitation of Pilate's house in Jerusalem

We returned to Cadiz from Seville, a very pretty, clean town, but I think it much overrated, and it is not so

prettily situated as Genoa. The ladies of Cadiz have, however, been celebrated in all times, and with justice. Here is to be seen the famous Gaditana walk 'meneo' or 'aise' described by Mrs. Romer as something between the French 'wriggle' and the English 'grenadier stride.'

I must now ask you to do one or two commissions for me. In the first place, choose me some lodgings, in or near the 'Karl Strasse,' if possible on the sunny side of the street; take them on the first of November, and if possible get my things moved into them. Luna, in his letter to the Professor, will have told him that I am bringing some things from him, but that I could not bring *cigars* as I came through Austria, but you can tell him that the *genuine* Havana cigars in Spain are quite as dear and not so good as in England; English cigars are the finest in the world.

Yesterday I went to Xeres, the wine place, and saw a wine magazin, tasted all the finest, and got two samples of the wine which may interest the Professor, and also some of the earth with which they clear the wines, but I shall give him all the information I got when I see him."

I have now to rely entirely on my memory for the remaining portion of my tour in Spain. We went from Xeres to Malaga by steamer, and took a diligence to Granada, a journey of several hours, over a road as bad as that from Huesca to Saragossa. We spent two days at Granada and visited the Alhambra. The beauty of the situation, with the Sierra Nevada to the south, has been often described, and quite fulfilled my expectations.

We returned to Malaga and then by steamer to Gibraltar. The town itself is as ugly as any English or Welsh country town, with the English public-house for the sale of beer at a bar, instead of the pleasanter café of Spain, with its

excellent chocolate. We of course visited the fortifications, which are very interesting, but much the same to outward appearance as they were sixty years ago, and, much to our amusement, we joined a fox hunt on the neutral territory between the English and Spanish lines. Jumping over aloe and cactus hedges and over very different vegetation from English turf was not very agreeable, but we enjoyed it for its novelty.

Being so near to Africa, we could not resist the temptation to visit Tangiers, so went over in a sailing-boat, expecting to return after a day or two spent in seeing the town. To our dismay, we found we could not return, owing to contrary winds, and were obliged to remain ten days until we found an opportunity of returning. We had no reason to regret our detention as we formed a very pleasant party. A Mr. Ball (who had left his wife in Gibraltar), constantly bemoaning his fate, was a typical Englishman, grumbling about everything foreign, and became the butt of the party. The others consisted of two Italians, quite pleasant companions, a Mr. Melby, a Danish landscape and marine painter, and a Mr. Johnson, an English artist, who found subjects for his pencil which adorned the walls of the Royal Academy for many years.

The hotel, the only one in the town frequented by foreigners, was kept by an old Scotchwoman with her two daughters, called "Rock Scorpions," as they were born on the Rock. In the sitting-room there was a piano, and as I was able to play a little, we danced with the "Scorpions," and sang songs—English, Negro Melodies, Italian popular, and German student songs, in which they all joined in the chorus. But we soon found out that there was much to interest us in the daytime.

Tangiers is divided between Jews and Moors, and we were fortunate in witnessing a Jewish wedding. The ceremony and preparations for the wedding occupied from ten days to a fortnight. One evening we attended a reception at the house of the bride. She was seated, and surrounded by what I think may be called her bridesmaids, and the groom, after an interval, entered the room, accompanied by his friends and family.

The young Jewesses in Morocco are very beautiful, dressed in Spanish costume, with a mantilla, all in black and very becoming. Ford, in his *Guide to Spain*, a most interesting book, says: "The daughters of Israel both at Tetuan and Tangiers, are unequalled in beauty; observe the eyes, feet, and costume of these true Rebeccas." We were, of course, regaled with coffee and sweetmeats, in true Oriental fashion. The next day we assisted at the dressing of the bride for the ceremony. She wore a high tiara, was painted and adorned with jewels and a richly coloured dress, but her natural beauty was spoilt, and I much preferred the appearance of the bridesmaids, in their simple but elegant Spanish costume. We joined the procession through the streets, the bride being carried in a kind of sedan chair. There preceded or followed this ceremony many others, but I regret I have no record of our doings, and can only recall this very meagre account of a most interesting spectacle.

As we had to wait for an opportunity to return to Gibraltar, we visited Tetuan, having obtained on application to the English Consul, Mr., afterwards Sir Drummond Hay, a soldier as an escort. As it was necessary to ride, we hired horses; some had English saddles, others Moorish, the bridles mostly being only cords, not leather.

The journey took twelve hours, and as we approached, Tetuan was distinctly visible, and we thought a gallop of some twenty minutes would bring us to the gates in ample time before they closed at sunset. The speed of the various animals in our cortège varied very much, and leaving the guides behind, I forged ahead of the others, only to find that in reality the town was still some two miles distant, and that this appearance of nearness was due to the extreme clearness of the atmosphere.

Tetuan is inhabited by Jews and Moors in about equal numbers, living, however, in separate quarters, and as I approached the gate I was met by a crowd of Moors, who assailed me with loud objurgations, which I neither understood nor obeyed ; these were followed by a volley of stones, one of which struck me, so I retreated, and quickly rejoined my companions. We proceeded, however, to another gate, and I learned that I had foolishly tried to enter the Moorish quarters, where the Infidel was never seen.

There were no inns in Tetuan, but we lodged with a Jew, and were fairly comfortable. The next day, being a Saturday, we offered, although there was no bill, the equivalent in money about the same as we should have paid at the inn, to Nathan himself. To our astonishment he refused to receive it, but we were told afterwards to pay his wife, and she accepted the gift. We were told that among the Jews some sects believed women had no souls to be saved, but that, of course, it was incumbent on the Sabbath to do no business, and this accounted for Nathan's behaviour.

We returned to Tangiers the next day. The last part of the journey was along the seashore, and we galloped as

fast as we could get our beasts to carry us. This led to amusing scenes; the saddles and bridles were all rotten, and every one of our fellow-travellers was unhorsed, with the exception of my brother and myself, both accustomed to riding, even without saddle or bridle. One of the Italians was thrown over the head of his pony, when the girths broke, and we saw him for a moment on his head in the sand, and the saddle between his legs.

We were fortunate in finding a French man-of-war returning to Gibraltar, and as we had been delayed at least a week or more, it was necessary for me to hasten back to Munich as quickly as possible, as the Semester began early in November; we therefore took our berths in the first P. & O. boat for Southampton. As we stopped a few hours both at Lisbon and Vigo, the passage took five days or more. The weather was fine till we got to the bay of Biscay, and the peep we had of Lisbon and Vigo left a very favourable impression, and we regretted not being able to stay there longer.

The Bay of Vigo is most beautiful. Although I am a good sailor, I found a voyage of several days very monotonous, particularly as there were hardly any other passengers on board. Fortunately, there was a small library with an excellent edition of Byron's life and works in about twelve volumes. These I read through with great interest. I also assisted the first officer in making his calculations from the observations, which he did from tables without understanding how to do them correctly in certain cases. With my knowledge of spherical geometry and mathematics I amused myself in doing his work, which, of course, was quite easy. The crossing of the bay was without incident till we arrived at the Isle

of Wight on a foggy morning, and, to our delight, saw the Needles just visible through the mist, although we were quite near—a most imposing sight.

Landed at Southampton we were practically without money, so my brother went off straight to London, saw my friend Sam McCulloch, now a barrister in the Temple, from whom he borrowed five pounds, which he sent to me just in time to enable me to catch a steamer to Havre. Thence I hastened as fast as possible to Paris, caught a train to Strasburg, and through Ulm and Stuttgart to Munich, partly by diligence. On arriving at Munich I found I had just half a franc left, after three months' travelling. As I practically paid all my expenses out of my allowance, now about £150 a year, we certainly travelled much cheaper than would be possible to-day. The saving was not, of course, in the cost of locomotion, but in hotel expenses and food. In Spain we frequently spent for days together only about five shillings a day. In Munich the Parquet Sitz in the theatre cost only a gulden or one shilling and eightpence, which in *abonnement* was reduced to forty-two kreuzer or one shilling and twopence; the same arrangement of prices applied to dinner, which I took at the Baierische Hof.

CHAPTER V

ON my arrival in Munich I found that my sister had secured lodgings for me in a detached house on the Dult Platz, near the English café, much better rooms than those I previously occupied in the Karl Strasse.

I now worked hard at my studies to make up for the lateness of my arrival after the Semester had begun. As I said, my sister Emma was spending the winter in Liebig's house, and she and her great friend Nanrv were enjoying the first delights of a girl's life—dances, operas, theatres, all was delightful, but, alas! was only of short duration, for soon after my return from Spain, she began to be ill; but she was so full of pleasure, she fought against it all and persevered in her ordinary life, which was full of occupation, for in spite of all the pleasant side, she and her friend were taking many lessons, amongst others, sewing lessons and riding lessons.

It so happened that a circus had come to Munich, and the girls begged Professor Liebig to let them have riding lessons. He went to the manager of the circus to see about it. Rather an amusing incident happened, for after discussing the matter, he asked the Professor's name, and then said, "Instead of arranging for my assistant to teach the young ladies, I will do so myself, for as I am, like you, a professor of my art, I never give



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lessons myself, but in this case will certainly do so!" This tickled Liebig's fancy immensely.

This riding was a great source of delight, especially when, after the first few lessons, the girls were allowed to ride out. In those days no young ladies rode in Munich except the daughters of Duke Max, and a few ladies connected with the military, and even they almost always rode in the grounds of their palace, or in the riding school; so whenever my sister and her friend appeared, the people thought it was the princesses, and there was great excitement.

Alas! this came to an end, for after a few lovely rides in the neighbourhood, one day I rode with them to the Menterschweig; there Liebig met us, and we alighted and had coffee at a little Wirthaus, and again mounting our horses rode home. My sister seemed dreadfully exhausted and went straight to bed, where she remained for three months, for soon typhoid fever developed, and she was for weeks between life and death. Few strangers who remained long escaped a more or less serious illness if they caught a chill or became over-fatigued, for typhoid was then very prevalent in Munich. The winter now set in with a considerable fall of snow, and I was much worried, as when I telegraphed to my parents, asking them to come and relieve the anxiety of Professor Liebig and his family, my father was unable to travel, owing to the severity of the weather. Christmas with all its delights came, but it was a sad one to all. Liebig and his family were most kind, and his daughter did much of the nursing. It was necessary for someone to be in attendance night and day, and it was not easy to get trained nurses. With a view of doing everything in

my power to assist, I frequently spent the night or part of it, in the sick-room, sometimes together with Nanny.

These were anxious times, and at last Dr. Pfeufer said to Liebig, "I have no hope of saving the young girl's life, the crisis is past, but she is so weak that she cannot digest any food, and the only chance of recovery is to find a food which the patient can assimilate. Medicine can do nothing, perhaps science can." This was a dreadful blow to Liebig, who felt the responsibility of this young English girl being so ill in his house, and on hearing that all the usual foods had been tried, including, of course, ordinary beef tea, he, having made a special study of the subject, thought he could give it in a form which might assist the digestion, and he prepared a special extract of meat without coagulating the albumen when the beef tea was prepared with boiling water. A servant was sent out to bring in a young chicken, from which Liebig had a few pieces of the meat cut and minced fine, then cold water poured on it and left to soak a few hours, to which he added a few drops of muriatic acid, and when Dr. Pfeufer next came, gave it to him, and asked him to try a teaspoonful being given every half-hour. This he willingly agreed to, after having an explanation that it was by a chemical process food already digested. The result was most satisfactory, and my sister gradually improved. Later, unfortunately, she had a relapse, but youth happily conquered and she continued to improve, and my parents having come to Munich, when she was able to be moved, my father took a suite of rooms at the Baierische Hof, then the best hotel.

The cold extract of meat which Liebig invented for my sister was extensively used in the hospitals of Munich,

and possibly is still used ; and an interesting incident regarding it happened a few years after my sister returned to England. Liebig wrote her : " We have been in great anxiety about Agnes, but your illness, which was the cause of so much anxiety and grief to us, proved the greatest blessing, for Agnes, during her illness, was not able to take any food, but lived on *your* soup for many weeks."

A curious incident happened during my sister's residence in Liebig's house. One day she was sitting in the drawing-room, when the servant announced a strange gentleman, but she did not hear the name. She rose and greeted him, asking him (in German) to take a chair, saying Professor Liebig would come soon. Then they talked about the weather, etc., for some time, and as Professor Liebig did not come, she said she would go and see where he was. The gentleman wished to explain there was no hurry, but was at a loss for a word, so used an English one, apologising for not knowing much German, so my sister asked him what country he came from, and he said America ! Tableau !—when she explained that she was English, and they had both been struggling to talk German for some time. His name was George J. Brush, and he afterwards became a great friend of mine, and when he returned to America he was appointed Professor of Mineralogy at Yale University, and subsequently the Curator and Administrator of the Sheffield School of Science attached to that Institution.

When my sister was stronger, my father determined to give a dance ere taking her away from Munich. As our sitting-room was a very large one, it was arranged that dancing should be there, and a supper-room was adjoining.

It was a great success, and a great amusement was that my sister danced the first waltz with dear fat old Dr. Pfeufer, who, however, danced beautifully.

Shortly after this, when Easter holidays began, I went with my father, mother, sister, and Professor Liebig to the Riviera, a resort in those days very little known. We stopped some days in Paris, where I had the pleasure of seeing many celebrated men, old friends of Liebig's, or pupils, who all held distinguished positions; Dumas, the great chemist, Pelouze, at the Monnaie; Wurtz, at the Collège de France; and Regnault, at the celebrated China Manufactory at Sèvres.

From there we went to Lyons, and sailed down the Rhone to Marseilles. On the boat we met an interesting man, son of Prince de Polignac, who had been Prime Minister to Charles X, and conversation with him made the time pass very pleasantly. From Marseilles we took boat for Nice, which was supposed to be a journey of twelve hours, but the boat was so bad, we were twenty-four hours. Everyone was ill except me, and I was very miserable, for there was nothing decent to eat on board, and I was very hungry.

When we arrived at Nice, we spent a few days there very pleasantly, and one night went to the theatre, where we saw Madame Dejazet, the celebrated actress, in the part of a gamin de Paris, and *Le Premier fait d'Armes de Richelieu*. My father engaged a vetturino, and we drove along the lovely Corniche road to Genoa. On arrival the landlord received us with many apologies, as he so much regretted he could not give us the rooms he had promised us, for the family which was to have left that day could not do so until to-morrow, when we should have the rooms, and

in the meantime he would give us the best he could. They were on the entresol and were fairly good, except a small single one which was to be occupied by my sister. With all this annoyance my father had worked himself into quite a temper, and said such a room was not fit for any lady to sleep in, so the old gentleman insisted on sleeping in it himself, and my sister joined my mother. Next morning we were ushered into the new apartments for breakfast. These rooms were magnificent, and all seemed well, except that the poor old gentleman had a great swelling on his eye, from having been stung by a hornet, which made him very indignant !

In the course of the day we heard of a sad disaster. The lady who had occupied our rooms was an Italian princess, and as the previous day promised to be very rough, she decided she would not start on the steamer on a Friday. Being a person of great influence, she persuaded the captain to postpone starting till early the Saturday morning, and in the course of a short time the wind rose, the boat was driven on a rock, and everyone on board drowned, except Sir Robert Peel, son of the great statesman, who was in his carriage on the deck. When the accident happened he jumped overboard, swam to shore, not far distant, and was the only person saved.

From Genoa we proceeded to Turin, where Liebig and I started back towards Munich ; the rest of the party proceeded over the Mont Cenis to Paris, *en route* for England. Baron Liebig and I returned to Munich by the Splügen Pass. We took the train to Novara, and then by diligence to Milan. The Baron and I had two seats in the coupé, with a netting for small parcels, in which I placed a few sandwiches wrapped up in newspaper. At that time the

Austrians occupied Lombardy in great force, as they were continually expecting an insurrection instigated by Mazzini, who frequently travelled in disguise and baffled all their efforts to arrest him. When we arrived at the frontier between Piedmont and Lombardy, all the passengers alighted, had to give up their passports, and had their luggage taken for examination by the Customs officers. While the examination was proceeding, I noticed a young English girl who was much annoyed by the way they searched her trunk; they turned out all her clothes on to the bench, and found among other things a bundle of loose music. This they handled very roughly, and spoke to her in German, which she did not understand, so I said to them: "Don't you see this young girl is a governess and an Englishwoman, who has nothing to do with politics?" They at once attacked me, saying I must not interfere, and asked for my passport. I told them it had been taken with the others for examination. They then took me to the passport office. The officials there asked which was my passport; I pointed to it as it was easily recognised as a Foreign Office passport, at that time a rather expensive luxury. After looking at it they questioned me as to my nationality. I, of course, said I was an Englishman, and my passport was signed by Lord Palmerston, the Foreign Minister. This did not help matters, as he was the most hated man amongst the Austrians, who frequently repeated the lines, which may be translated:

"If the devil has a son,
He is surely Palmerston."

They then told me I was not an Englishman, because I spoke German too well, and it was evident that what I

said was not true. All the luggage had been put back in the diligence, and the other passengers were given their passports, but they refused to give me mine, and said I must call at the Police Office when I reached Milan. This, however, did not end the trouble. They asked which was my place in the diligence. On telling them it was in the coupé, they entered, and, unfortunately, spied my bundle of sandwiches in the newspaper. They took out the sandwiches and began to decipher the newspaper, which, however, contained nothing treasonable. They then replaced the sandwiches, which they had fingered with their dirty hands, and handed it back to me. I declined to receive them, and told them they might eat both. Thereupon a guard of soldiers with loaded rifles was ordered out, and I was placed under arrest. I appealed to them again, saying I was an Englishman with a passport signed by Palmerston, whom they dreaded on account of his celebrated speech containing the words, "Civis Romanus sum," saying that the power of England would protect all its subjects. This rather staggered them, and I was again cross-examined on the subject of my nationality. At last they decided to let me proceed to Milan, and to call for my passport at the police office. We arrived at the gates very late, and I was again asked for my passport, so I explained I had not got it, but was told I could not get it at the police office that night, as it was closed. On my giving the name of the hotel I was going to, they allowed me to go there instead of passing the night in a cell.

The next morning I called for my passport, and again they insisted I was not an Englishman, but after further explanation they decided to *visé* the passport, to the effect

that I must leave Lombardy or any Austrian dominion within twenty-four hours. I thanked them, and said it was exactly what I intended to do. So ended this episode, which I have included in my recollections, as it gives some idea of the state of Italy in 1854. Baron Liebig, being a German, was much more concerned than I was, as if he had been mixed up with the affair it might have been very unpleasant, as he and other North Germans were not popular in Bavaria, which was politically allied with Austria.

In the year 1854 King Max, following the example of Prince Albert, determined to have an Industrial Exhibition, and for this purpose built a glass palace, not so beautiful as our Crystal Palace, but considered very creditable to the firm of Kramer and Klett of Nuremberg, in the comparatively backward state of Bavarian industry. The Exhibition attracted many foreigners, and most of them called on Liebig, and were found at the evening parties, which after music performed by the musicians, usually ended in a dance for the young people.

The following extract from a letter to my sister gives my impression of the Exhibition :—

“ You know, I suppose, that the Munich Exhibition is open. The opening ceremony was a humbug. The King and Queen, and then a number of people in uniform, amongst whom were nearly all the Professors, went in procession through the building, but as I care so little for such things, I did not pay attention to it, and therefore cannot describe very well what it looked like, except that it appeared to me ridiculous to see men of science dressed up like monkeys for a show. The Exhibition itself is but a poor imitation of the London one, but there are some

very pretty things in it, particularly the painted porcelain, in fact it is something like Steigerwald's shop on a large scale. The most interesting things here are the representations in the theatre—all the best actors of Germany act together in Shakespeare and classical German pieces, including Lessing's *Emilia Gallothi*, Schiller's *Maria Stuart*, Goethe's *Faust*, and others. I have been to see nearly all, and was exceedingly pleased, as you will imagine. The best actress, in my opinion, is Miss Seebach; I saw her as "Gretchen" in Goethe's *Faust*, and have never seen anything finer. She is perfectly natural and unaffected, which is the principal thing in such a piece.

There are also soirées every Thursday at Dönniges' and Friday at Liebig's, where all the principal artistes and scientific men meet, and they are exceedingly pleasant. Miss Seebach, Emil Devrient, Doring, and all the best actors are there. I have also met some English—Miss Law, who is here with her uncle and aunt, Mr. and Mrs. Barlow, is a very nice young lady. Mr. Barlow is Vice-President of the Royal Society.

A very strange thing occurred the other day. A Mr. Herbert, introduced to me by Wertheim, has been travelling for the last year on the Continent, where he met a young German lady, Miss Haupt, with whom he became acquainted, and carries on a correspondence with her mother. Yesterday, speaking of her, he mentioned that she was staying in Liverpool, and that if I met her I was to remember him to her, and it immediately occurred to me that Emily Harrison and a German friend had been staying with Richard, and, as it happens, this young lady is the identical one Mr. Herbert met.

Luna is also staying here for a few days.

The cholera has come here, and we have had some cases in the hospital; we had a post-mortem examination to-day of the first cholera patient I have seen."

This severe cholera epidemic reached Munich when the Exhibition had been open about two months. The city had for years been subject to typhoid fever (abdominal typhus), owing to bad drainage and presence of cesspools in every house. As a result, the spread of cholera was very rapid. In the hospital the first case was diagnosed, and Pfeufer earnestly requested the students not to spread the information, as fear and nervousness often increased the number of attacks. But, of course, after about a week the fact could not be concealed, and rigorous measures were taken to regulate the diet of the people, excluding fruit, which at such a time was prejudicial. This was followed by investigations as to how the disease arose, and it was distinctly traced, by Pettenkofer and Thiersch, to the Exhibition, which had brought many people from cholera-infested districts.

The news of the outbreak prevented many who had arranged to visit the Exhibition from coming, and most of those who could afford it fled to the mountains. As a medical student I decided to remain and see the progress of the disease in cases treated in the hospital. My great friend George Brush, an American studying Mineralogy under Kobell, also remained, but one day I found him suffering from premonitory symptoms and dosing himself with a mixture of opium and chalk. I persuaded him to leave Munich for the country, and at his earnest desire decided to accompany him. In the mountain air he soon recovered, so I returned to Munich.

What a frightful change I found in the appearance of the city! In place of numbers of people in the streets on pleasure bent, many driving in carriages to visit the Exhibition and the usual sights, there were hardly any

foot passengers, and the only vehicles to be seen were hearses bearing the victims of the epidemic to the cemetery. All lectures had been closed, and my friends of all ranks and professions, with the exception of the medical men, had left the town. I remained only a few days, and then went to Partenkirchen and the Lakes, accompanied by Brush, Johnson, and Herbert, forming a pleasant party.

We had to put up in a second-rate inn, the "Star," as the "Post" was full. We preferred, however, staying in Partenkirchen, as the Kobell family were at the "Post." We usually joined them there for supper, and this led to an unfortunate occurrence. In the hotel we only took coffee in the morning, and during the day made excursions in the neighbourhood, returning in the evening. As all our friends were in the "Post," we went there for supper. On our return to the hotel we found our luggage in the hall, and on inquiring what this meant, were told we must clear out, and were presented with a bill in which everything was charged exorbitantly, and our luggage was detained until it was paid. It was late at night, most of the houses were closed, and we naturally refused to pay the bill unless deductions were made, and we could find another place to go to.

The landlord was now joined by three or four ruffians, who seized us to throw us out; we naturally defended ourselves as best we could, and were gradually getting the upper hand, when the *polizei* entered. We explained the circumstances to them, and they suggested we should leave the hotel for the sake of peace, and they would find us lodgings. This we consented to do, and we got our luggage and paid the bill under protest. When we met

our friends the next day we were told it would be useless to bring an action against the landlord, as the people hated all foreigners, and the magistrates were often afraid of offending the ruffians, who were well known to be a lawless set and given to fighting and brawls. So we agreed to do nothing, but after two or three days we were summoned by the landlord for assault. We appeared before the magistrate at Garmisch, a small town distant about two miles. Our interview with him was amusing, as he said he knew the Kobells very well, who I said would give me a character.

The landlord demanded damages for the loss of two teeth which he said were knocked out by a blow with the fist from Johnson. Our reply was that it might be true he had lost his teeth, but it was not Johnson who had injured him, as the marks of his teeth were on Herbert's hand, and Herbert had received wounds on his head which had to be attended to medically.

The poor magistrate was placed in a difficult position. We were friends of Kobell, and our testimony could not be replied to by lies told by the other party, but if he decided against them and in our favour, he risked bad feeling on the part of the villagers. So after vain endeavours to smooth matters, he reluctantly decided to dismiss the case, both sides paying the costs.

Our new lodgings were clean and comfortable, and we took our meals and spent the day with the Miss Kobells and one or two of their young girl friends—taking walks on the mountains, gathering alpine plants, and reading English poems and discussing English and German literature. We spent about a month at Partenkirchen, visiting all the beautiful spots within walking distance, amongst

others, the Eibsee and Oberammergau, now so familiar to English and Americans, who go to witness the celebrated Miracle Play, which I saw for the first time in 1880, as it is only performed every ten years.

I returned home for the celebration of my coming of age on November 6th. I have very faint memories of what occurred, but we had a very pleasant time at Seaforth, ending with a dinner, at which Samuel Lover, who was present, proposed my health, and I was very nervous when making a speech in response.

I, of course, had to return to Munich as quickly as possible for the Semester, which began early in November. My life there was now somewhat changed. When I first went to Munich with my parents and sister there were very few English or Americans resident in the city, and during 1853, while my sister was staying with the Liebig's, I associated almost entirely with Germans. In addition to the weekly receptions at Liebig's and other houses, I took part in most of the public balls. The Officers' and the Artists' ball I enjoyed very much, as I knew so many ladies who frequented them, and had no difficulty in finding partners. Hardly anyone went to the evening entertainments in cabs or carriages on account of the expense and also the difficulty in obtaining them, as the cab-drivers frequently declined to go out at night, preferring to drink beer at the breweries and restaurants.

In addition to these more select dances, during the Carnival almost every grade of society had its own entertainment, to which I, as a student, was always welcome. In this way I became acquainted with all sections of the population, more so than most foreigners, whose little

knowledge of the language and dialect stood in the way of enjoyment.

About this time Liebig's daughter Nanny became engaged to Karl Thiersch, and was married to him in August of 1855. He had been appointed Professor of Surgery in Erlangen, and my sister and I often visited them there in after years. Thiersch subsequently went to Leipzig, and became one of the most celebrated surgeons in Germany, and the head of the Medical Staff of the Saxon Army during the war of 1870. He was one of the first to introduce Lister's antiseptic treatment into German hospitals at a time when London would have nothing to do with it.

During the years 1853 and 1854 a few Americans had come to the University and to attend the Art Schools. Among these were Brush, studying mineralogy, Samuel Johnson, agricultural chemistry, and Rood, to study physics, particularly optics, as he was also a painter. All these, when they returned to America, obtained positions in American Universities, and when I visited the United States twenty years later, I met them all again, but others, well-educated young men, had been killed in the great Civil War of 1861-1864.

On my return to Munich after celebrating my twenty-first birthday at home, as my sister was no longer at Liebig's, I did not go there so often in the evenings, and became much more intimate with the American Colony.

At the end of 1854 William Furness settled for the winter in Munich, studying painting, and his brother Horace, later to become famous as the author of the "Variorum edition of Shakespeare," came to Munich to see him. They were sons of William Furness,

the Unitarian minister at Philadelphia, who had been a classmate of Ralph Waldo Emerson at Harvard University. Horace was making the Grand Tour through Europe as companion to a rich young American, Atherton Blight. Horace and I soon became great friends, and we visited each other's rooms, spending the evening in delightful conversation and music. The songs were principally Negro melodies, then popular as sung by the celebrated Christy Minstrels in the United States. All the Americans, about six or seven in number, joined these parties, and one evening we entertained the Bandmaster of one of the regiments, who was so struck with these melodies that he composed two military marches founded on them, which were frequently performed by his band, and they were highly appreciated by the Muncheners. The time passed so pleasantly that Horace and his friend, instead of staying only one month, remained six months—well into the summer. I worked hard at physics and mathematics, but attended no regular course of lectures.

At Easter I went to Heidelberg for a week; my old friend Sam McCulloch had left, but Edmund Dana (of Boston, a relative of the poet) was there. This was, I think, the time I met a young American of the name of Rucker. It happened that in some of the papers we saw that a certain Herr D. gave a private exhibition in a grand boat on the Rhine, which was drawn by four or six swans. This led to Rucker and myself taking advantage of April Fool's day to play a huge practical joke.

We inserted an advertisement in the Heidelberg paper to the effect that Herr D. would appear at two o'clock in the afternoon at the bridge over the Neckar, in a boat, drawn by geese. To our astonishment, as it was a fine

sunny day, the road alongside the river was crowded with pedestrians of all classes of the population. We heard them, when the boat did not appear, asking, "Where are the geese?" to which we replied, "Don't you see them?" and then disappeared in the crowd. We afterwards heard that the occupants of the villas bordering the river had invited guests to see the procession and take coffee; among these was the celebrated Ritter Bunsen, who had been Prussian Ambassador in England, but now retired. We also heard that the joke had aroused very bad feelings amongst some of the better classes, and the editor of the newspaper was threatened with a lawsuit, particularly as the next day we put in an advertisement to the effect that "The Heidelberg Goose March" could be had at all music shops. However, when the authorities heard that the culprits were two students, on reflecting that it was April Fool's Day, they thought it wiser to let the matter drop. Nearly twenty years afterwards I met some people in London who mentioned it to me as one of the best practical jokes they had ever seen.

CHAPTER VI

AS I was now of age I began to think seriously about my future career. I did not care to follow medicine as a profession, and as I was more interested in the exact sciences of Chemistry and Physics, I resumed my studies both in Physics and Mathematics, working practically with one other student, afterwards Professor Wüllner, a celebrated Physicist in Professor Joly's laboratory. I intended later to go to Heidelberg to work in the laboratory of Professor Bunsen, who had left Marburg to occupy the Chair of Chemistry at Heidelberg, previously filled by Gmelin.

The following extract from a letter to my sister expresses the trend of my thoughts about this subject of a profession:

"I have been away from here for some ten days. I first went to Frankfort, where I saw Sophy and Traut-schold. They are both well, as also the children, but Sophy doesn't like living in Giessen much.

From Frankfort I went to Heidelberg, where I saw Dana and one or two other of my old friends. I also met an old schoolfellow of mine, Roscoe, a grandson of the great Roscoe, who was with me at Miss Hunt's! Strange to have met him in Heidelberg, not having seen him for about twelve years, is it not?

I am glad you are going to Manchester for a few days; it will be very pleasant for you to have a change of scene.

When one is so pent up in any place for a long time, a change is always desirable. I feel quite a new man since I was in Heidelberg. I suppose you will not see Emily for some time after her marriage, but if you write to her again, give her my love (if such a thing is not wrong from a young gentleman to a young married lady). I am so little influenced by etiquette, and for that reason know so little about it, that I do not see any harm in expressing my feelings without regard to what society may think proper. I am beginning to think that a man ought to act just according to what he thinks right, and not according to the opinion of the world; just because the contrary is so much practised in England, seems to me to be the reason that society in general in England is so insipid, people do not speak their own thoughts, they act not as individual *men*, but as parts of one great machine, if I may so call it—society. You must not think that for this reason I would throw off all deference to the laws of society. A person ought not to say or do anything injurious to his neighbour, but he ought not to act as a machine, when he is created an individual man.

But, my dear Emma, you will begin to think that I have become dreadfully prosy, but lately I have begun to think a great deal about the 'duties of man,' and whenever I get a pen in my hand I can scarcely help writing down what is uppermost in my mind. Well, God bless you, dearest Emma. May you continue as we'll in health as you report yourself to be."

A few weeks later I wrote the following :

"I have just received your letter, and you would not have received such a ready answer, had your letter not stirred me up to answer your objections to my choice of a profession. It is very easy for people to say, Why did

you not choose a profession? But my answer is ready. What profession? Law, Medicine, and Divinity are *the* three professions in which a man in England may gain a name and a competency: Medicine I cannot master, at least my former studies have been so purely mathematical and scientific that medicine disgusts me. Law I have not been brought up to, and only the very highest talents, combined with immense work, can secure a person a position. As to Divinity, Emma, I believe I should make a very good, perhaps *learned* Divine, compared with most of our present Divine Preceptors in England, but I am afraid I should not be orthodox enough, and I can't play the hypocrite, even for a nice Living. What do you now say to a *Profession* of the *minor* professions, Chemistry, Natural History, Physics, Belles Lettres, Dancing—I am going to study two—Chemistry and Physics. These will never support a man in any decent way, if he does not take some Professorship or other. Emma, the very worst *business*, in the *money* line, is better than a *Profession*. In it you gain experience in *money transactions*; should you fail, you go out to Australia or America.

There is one *profession* I should like to follow, but there can be no idea yet of such a thing; it is not one in which a person makes money, and therefore I must first make the money to live. I mean Politics; Politics, in spite of myself, absorb nearly all my thoughts. Should I be successful in business, I may then enter on a political life. Here are my answers to your advice, for which I thank you, and am glad to hear it was prompted by love—a good heart, Emma, is better than a fine intellect; act according to what you *feel*, not what you *think* is right, and you will act well.

I intend studying chemistry and physics and mineralogy. If possible I shall pass an examination in August, but I think not. I have forgotten a great number of facts

since I began to study medicine, and it is no easy work getting it up again.

Now, dearest Emma, I trust you are satisfied. Do not expect too much from me, and you will be satisfied. Talents, you think I have. Well, my dear Emma, as Liebig wrote to James once. I will write to you, 'Talents are only a Bill of Exchange on the future, they may be *cashèd* or not.' Have you read the *Newcomes* by Thackeray? If not, read it. Clive Newcome, his hero, had talents, and yet up to his third volume Clive has come to nothing.

I must now conclude, trusting you will write and tell me what you think of my answer."

During the remainder of the Semester nothing particular occurred, and the Paris Exhibition being the general subject of all thoughts, I wrote to my sister :

"From all your letters I cannot make out whether you are going to Paris or not, to meet Liebig and myself. One time I hear that you are coming with Richard, at another that you are not coming at all.

Liebig at first had not intended staying in Paris, because when he is there he has no time that he can call his own. But now I suppose he will go, whether you go or not, as Miss Graham, a young lady from Scotland, staying with the Liebig, returns with him to England. I myself have no wish to stay in Paris except just to see the Exhibition. I am afraid I shall be there when Queen Victoria comes over. It will be so full then that I am half disinclined to return by Paris at all.

What is Sam doing? Write me his address by return of post, so that I may know where to find him in London. Does he intend visiting Paris? If he does he might meet me there. By the by, Kuhlmann was here a few days ago, and proposed that you should go for a week or so to

Lille, and then they would take you to Paris. However, write and tell me your plans. Mine are to leave here as soon after the wedding as possible, i.e. the 16th of this month. I believe it is also Liebig's intention to do the same. Everything has been going on in the same old way here. I have not been out of Munich for nine months, except a week in Frankfort and Heidelberg; and you may imagine that I am very anxious to breathe some purer air and take some bodily exercise.

Miss Seebach, an actress from Vienna, I saw, and was so much pleased with last year as 'Margaret' in Goethe's *Faust*, has been acting here, and last night she gave 'Juliet' in *Romeo and Juliet*. She was very fine in the part; but as I have not seen the play on the English stage, I cannot judge whether she is better than Miss Faucit.

I must now conclude. There is no news here. Most of the people are out of town. Brush was down here a few weeks ago. He stays in Freiberg till September, and then goes to London to study in the School of Mines. Should he come to Liverpool when I am not there, I expect you to show him every kindness in your power. He has got the Professorship of Metallurgy in Yale College, which, together with Harvard, are the first Universities in America.

I fancy whenever I pay a visit to Yankee-land that I shall have as fine an introduction to all the first men as any person can have."

I stayed in Munich for Nanny Liebig's wedding. The evening before the ceremony the "Polterabend" was held at Liebig's house. We had dancing, and the singing of a small musical sketch composed by Häuser. Leporello's song in *Don Juan* was parodied, introducing in succession numbers of admirers and adorers of the bride, which was very amusing.

I led off the cotillion with Nanny, and we kept up the revelry till an early hour in the morning. It struck me as a much livelier and more amusing custom than the English dinner in the evening after the wedding breakfast, or a visit to the theatre when all were tired after the fatigue of the ceremony, and a very long wedding breakfast, which was customary in those days. A day or two after the wedding I accompanied Liebig to Paris. Kuhlmann met us there, and all the most distinguished chemists called on the Professor. The Queen and Prince Albert with the Princess Royal, afterwards Empress of Germany, were there, and on the day of their visit to the Exhibition the price of entrance was raised to twenty francs, which I was unwilling to pay, but as Liebig gave me his ticket, as he went with a special party, I availed myself of it, and witnessed the Imperial and Royal Procession, led by Louis Napoleon with Queen Victoria on his arm, followed by Prince Albert with the Princess Royal and the Prince of Wales. As I do not remember seeing the Empress Eugénie, I presume she was not present. The Exhibition was by no means as fine as the great Exhibition in 1851 in Hyde Park in the beautiful Crystal Palace, as the French building was not at all beautiful, but remained for permanent use. I think we spent about a week in Paris, leaving on the 27th August, proceeding to Lille, where we stayed with Kuhlmann, and on to London on the 29th, where Liebig and I stayed at the Piazza Hotel in Covent Garden. We went to the Opera and possibly one or two theatres; saw Graham, Hugo Miller, and many chemists, Liebig's former students.

Liebig about this time received an invitation from the Queen to visit Osborne, and asked me to accom-

pany him on his journey. As I had some friends at Southampton, I thought I might avail myself of the opportunity to visit them, so accepted. The Queen's yacht met Liebig, and took us across to Osborne, and I dined there in a small house connected with that of the Queen, with Becker, Foreign Secretary to Prince Albert. Liebig, of course, stayed the night and passed the next day at Osborne House, dining in the evening with the Queen, and there met Lord Palmerston, just returned from the Crimea.

The next day I joined Liebig and we went over the house and grounds together. The Park was very beautiful and in the grounds there was a large cottage in imitation of a Swiss cottage, which was used by the Royal children, where they amused themselves in cooking their own meals, wood-turning, making collections of plants, butterflies, etc. In this way their amusements became part of their education, as when there they usually spoke German, and as far as possible became Swiss peasants.

I heard from Becker amusing accounts of all the Royal family. Prince Arthur showed considerable musical talent, the Prince of Wales was very lively and fond of amusement. He also told us that Princess Alice was remarkably clever and intelligent, even more so than her elder sister, who also had intellectual tastes.

In the evening I went to Southampton to stay with my friends, and the next day returned with Liebig to London, when I returned home, and Liebig went to Oxford to meet Daubney, and then came on to Seaforth. We paid a short visit to the Lake country, which Liebig had not seen. At Patterdale, Professor Daubney of Oxford joined us. He was a peculiar character, very

absent-minded, and had lost his luggage. In appearance he resembled a pouter pigeon, but his conversation was very interesting. He filled the Chair of Chemistry at Oxford, but lectured also on geology and botany. His principal work was a description of the extinct volcanoes of the Auvergnés.

We stayed at Keswick one or two days at the old Royal Oak Hotel, and one evening we went to the theatre. Of course the performance was very poor, and I do not remember what play was acted, but during an interval between the acts the manager came forward and announced the fall of Sebastopol, which brought an end to a disastrous war which might have been avoided and which left England without any advantage, owing to the miserable state of our army organisation and the failure in everything except the bravery of our soldiers, who had suffered immense losses compared with their numbers, and most of the glory was gained by the French army.

Liebig now returned to Germany, and I had intended not to return to Munich, but to go for the winter Semester to Heidelberg, to work in Bunsen's laboratory. The following extract from a letter I wrote to my sister Emma, dated October 9th, 1855, explains why I altered my plans :

"I arrived here (Seaforth) last night, and walked out from town. The governor has been talking to me, and has induced me not to go back to Heidelberg, but to stay at Woodend for the winter, and then to see whether I shall like it. I have determined on this for various reasons. It is, I believe, Liebig's opinion that if I intend going into the business, I should go immediately and see how I should like it, and as the governor seems rather bent on

my following this course, I shall do so. To-morrow I write to Bunsen to say I am not coming to Heidelberg."

From what I have previously written it will be seen that I had given very serious consideration as to my future career. My father for many years had given little personal attention to business, only interfering at intervals, when, owing to various causes, the results of the year's working were unsatisfactory. After removing from Newton he erected two new works, one at Flint, the other at Woodend, in the Widnes district. His original Liverpool works had been closed for two years, owing to the success of the Corporation in an indictment for nuisance, and for several years had been working under great restrictions, doing only a local trade.

The Flint works were managed by my brother Richard and his partner, Mr. Huntley; both Woodend and the Liverpool works were left entirely to the management of foremen. Under these circumstances it is not surprising that the general results were unsatisfactory, as the competition in the chemical trade was very great.

After some years of unsatisfactory working, my father naturally came to the conclusion that with my scientific training an improvement might be made, and as my brother James Sheridan had proved himself incompetent to carry on business, he pressed me very seriously to remain at home and look after both Woodend and Liverpool Works, until my brother Fred returned from Australia. I was thus launched on a business career in England. The change in my mode of life was anything but pleasant; at home my father lived a quiet, humdrum



JAMES MUSPRATT, AGED ABOUT 53
DIED 1886, AGED 93
From an oil painting by Trautschold

life, seeing few friends, very different from the Seaforth Hall of former days, when distinguished men, both literary and scientific, frequently came to visit him.

I knew few young men, and most of them without intellectual ability or tastes, so I was forced to take a special interest in the works and to devote my scientific training to practical uses. I was convinced that some knowledge of metallurgy and copper-smelting would be of the greatest advantage, and as my friend Brush was staying at the School of Mines in London, I arranged with him to pay a visit to Swansea, the seat of copper-smelting in England, and at that time the greatest producer of copper in the world. We visited several copper works, also the Dowlais Iron Works, near Merthyr Tydvil, and the knowledge I gained by this visit proved of great advantage in the management of our works.

My brother Sheridan had a chemical laboratory in Liverpool, but there was no metallurgical laboratory in the building. On inquiry I found that at Owens College in Manchester, Dr. Frankland, an old student of Bunsen in Marburg, who was Professor of Chemistry, had a small metallurgical laboratory, where I could practise assaying by the dry method. To avail myself of this opportunity I had to be entered as a student of Owens College. I went to Manchester every Monday, returning home on Saturday for the week-end. To my disappointment, I found that Frankland could teach me nothing, so I got a text-book on assaying, and worked by myself in the basement, where the assay apparatus were placed.

Owens College then was lodged in a large house formerly occupied by Richard Cobden, and my work was in the

cellar of the house. The only other worker in this region was W. J. Russell, who was occupied with gas analysis. In about two months I returned home, as I had learned enough to fit up the necessary apparatus for my own use.

CHAPTER VII

1856-1880

I HAVE only vague recollections of what I did in the year 1856. I lived with my father at Seaforth Hall, visited the Woodend Works once or twice a week, and the Liverpool Works regularly, riding into town on horseback.

I continued the study of metallurgy, and found it of great use in improving the smelting of the poor copper residues from Wicklow Pyrites, which was only superseded by the introduction of Spanish ores a few years later. Mr. Mason, the owner of the St. Domingo mines in Portugal, saw me at the Liverpool Works, and offered to supply his ore on much more favourable terms than we were paying for the Irish ores. The burning of this Pyrites required an alteration in the kilns, and as the sampling and assaying of the ores for the contents of copper led to much dishonesty, owing to the imperfection of the methods employed, causing a loss of profit on the burning, there was difficulty in inducing my father and brother to buy these ores, which are now universally used. However, I was at last given permission to make a contract for a supply for our Liverpool works, which led to such profitable results that after a year's working they were introduced at Flint and Woodend. This success led me to take a deeper interest in chemical manufactures and to my giving up all idea of following chemistry as a profession.

My studies out of business hours were devoted to politics, but not purely party politics, which had no special charms. I studied Political Economy, particularly the works of J. S. Mill, and books recording the struggle for Free Trade under Cobden and Bright, Sir Robert Peel, and W. E. Gladstone. The latter then belonged to the Conservative or Tory party, although forming a special group called Peelites, and after the death of Sir Robert, joined together for the defence of Free Trade. Very early after my settling down in Liverpool in the year 1856 or 1857, I joined the Financial Reform Association, under the Presidency of Robertson Gladstone, brother of William Ewart, but I shall say more on this subject later.

In the year 1856 Cyrus W. Field, who had been my father's agent in New York for the sale of bleaching powder to paper-makers, with whom he had a large business connection, came to visit my father. Field was then engaged in a scheme for uniting the two Continents, Europe and North America, by a submarine telegraph cable.

In the year 1848 to 1849, Mr. Charles Bright and Mr. Brett had successfully solved the problem of connecting England with the Continent by means of properly insulated copper wires in a cable which was laid between Dover and Calais and Dover and Ostend. Cyrus Field and some of his friends had secured telegraphic communication with Newfoundland, and formed a company called the New York, Newfoundland, and London Telegraph Company. They then, instigated by the success of the submarine cables between England and the Continent, and after consulting Mr. Bright, proposed to lay

a cable between Newfoundland and Ireland, a distance of a little more than 1000 miles.

The United States Government made a survey of the bottom of the ocean between these points, which presented no difficulties for the safe bedding of the cable when it was laid. Mr. Field saw clearly that if success was to be achieved, it should be a joint undertaking with England. An estimate was made of the probable cost of laying the cable, and it was proposed to form a company with a capital of £300,000 in shares of £1,000 each. He naturally asked my father to take shares, but after the great losses he had suffered in his business, he had lost heart, and reluctantly declined Mr. Field's invitation.

A meeting was then held in Liverpool, where the scheme was laid before the commercial public by Mr. Field, and its feasibility supported by Mr. Bright, Mr. Brett, and others experienced in electrical telegraphy. The capital of £300,000 was soon subscribed, and the first cable, three-quarters of an inch in diameter in the ocean, and of one and a quarter inch thickness near the land, was attempted to be laid, but it broke after paying out three hundred miles. The scheme was necessarily abandoned for a year, and a second attempt being made in 1858, the cable was successfully laid between Ireland and Newfoundland, but a leak appeared after a few weeks, and all communication ceased. These failures would have daunted most men, but Cyrus Field's enthusiasm and energy overcame all obstacles. In 1865 another attempt was made, this time using the Great Eastern to pay out the cable, which, however, snapped in mid-ocean. Next year, 1866, a new Atlantic cable having been manufactured, was successfully laid,

and the lost one of 1865 was recovered, spliced, and completed. Since then, as is well known, there has been continued telegraphic communication with America, and cables everywhere have been laid and are in continual use.

The year 1857 began in gloom. My mother had always been delicate, partly on account of the cares and worries in bringing up a large family, but during the last few years, which she spent on the Continent with my father, she had recovered her health, and we all looked forward to many years of happiness with her in her old home. The life at Seaforth Hall was very different to what it had been up to 1850, when the house was always full of guests, and we enjoyed a succession of balls, private theatricals, and the society of many distinguished literary men and artists. Now my father had practically retired from business, only going to town for a couple of hours during the day and returning home for dinner at the rather unusual hour of 3 o'clock. My mother and sister dined with him, but I had dinner by myself in the evening. Now and then some old friends would turn up, but we had few, if any, parties, and my sister and I visited few families in the neighbourhood.

My mother at the end of 1856 was taken ill, and for some months in the new year never left her bedroom. She died on the 15th March, and was buried in the grave in Walton churchyard, where three of her children who had died in infancy also reposed. She was Irish by birth and her maiden name had been Connor. My father felt the loss acutely, and became more depressed than ever, and so did we all, for my mother was devoted to her children, and we all loved her and missed her genial, kindly

presence, and my sister and I, who had been so constantly with her during her latter years, missed her more of all. My sister now took charge of the house, and I consoled myself with taking a more active part in politics. The times were very critical, the coalition Cabinet had been broken up by the retirement of Mr. Gladstone, and Palmerston had become Prime Minister.

In August, with a view to prevent my father from brooding over his great bereavement, his dear friend Baron Liebig agreed to join him on a visit to Italy.

My sister and I, together with my brother Richard and his wife, joined the party. We met Liebig in Paris, where we stayed a few days at the magnificent Hôtel du Louvre, the first of the large hotels on the American plan erected in Europe, and succeeded shortly after by the Grand Hotel in the Rue des Capucines, which together with the Rue Basse du Rempart had been reconstructed, forming the new Boulevard des Capucines, an extension of the Boulevard des Italiens, which up to that time had been one of the most celebrated pleasure resorts, full of restaurants of the highest class, such as the Café Anglais, Tortoni, and Café Riche.

We proceeded, I think, from Paris to Lyons by railway, and then over the Mont Cenis to Turin and Genoa. As we were a party of five, we hired a small diligence and posted most of the way to Naples, passing from Genoa to Spezzia, Pisa, Florence, Rome, the Pontine Marshes, Terracina, Mola di Gaeta, and along the Bay of Baiae, all full of interesting remains of Roman civilisation.

My recollection of this time is very imperfect, but as it was the first time I saw Naples, a most vivid impression of it was left on my mind. It was the month of August, and

happily there were few other travellers. We stayed at an hotel in the Chiaja, which had been a former palace, the rooms being very spacious, and consequently cool. We were wise enough to alter entirely our hours of rising and of meals, living as the Italians did. We rose about 4.40. Liebig, my brother Richard, and I took a boat, rowed to the middle of the Bay and bathed. On our return we had a cup of coffee, and then went to the Museum, and to see other sights, returning to the hotel about half-past ten, for *déjeuner à la fourchette*, or "collazione." We then smoked and took a siesta during the hottest part of the day, driving out in the evening and partaking of a late supper.

Vesuvius was in eruption, and one day we drove to Portici, and then rode on horses to the spot where the lava had reached, and ascended the cone on foot. This occupied over forty minutes, as it was very toilsome stepping over the large blocks of lava. We were each assisted by men with straps on their shoulders, to which we held on. These guides continually called out to my father, when he stopped for a moment, "Coraggio, Signor," and he replied: "It is not courage I want, but breath," much to our amusement. I, being active, rather troubled the man who led me, as I walked faster than he did, and reached the cone with little assistance. The sight is very grand, but it is otherwise unpleasant, particularly to those not used to sulphurous fumes. We descended on the other side of the mountain, covered with ashes and dust, and only took ten minutes to cover the distance which had occupied forty minutes in the ascent.

We returned home through Rome, and went by sea to

Genoa, where Liebig left us, and we returned to Paris, over the Mont Cenis. Soon after our arrival we were troubled by the great financial crisis in America, as, owing to it, Cyrus Field's firm stopped payment. This, however, only inconvenienced us for a time, for as soon as the crisis was past we were paid in full. As Cyrus Field gave himself up entirely to Ocean Telegraphy, we appointed a new agent, Benjamin H. Field, who was succeeded by J. L. Riker, who had been brought up in his office.

The crisis begun in America reacted on England, the bank rate went up to 10 %, and the reserve of bullion was very low. In November the Government authorised the Bank, as in 1847, to suspend specie payments, which necessitated the calling together of Parliament, which met on the third of December to pass an Act of Indemnity for breaking the law.

The Government of Lord Palmerston, early during the year 1857, met with reverse in the House of Commons. This was owing to the dissatisfaction of Mr. Gladstone and the Peelites with the Budget of Sir George Cornewall Lewis, whose speech suggested the reversal of the fiscal policy of Sir Robert Peel, by supporting the opinion that it was desirable to multiply the number of taxes to equalise their burden, and that a good system of taxation is one that bears lightly on an infinite number of points. This roused the indignation of Mr. Gladstone, and he assailed the Budget with all his fire and eloquence, pointing out that it would lead to a deficiency in the future.

This speech brought Mr. Gladstone into closer political relationship with Mr. Cobden and Mr. Bright, and when the war with China broke out, Gladstone supported Mr.

Cobden in a vote of censure on the Government, and was supported by Disraeli and the Conservatives. This led to a dissolution of Parliament in 1857. The consequence was that a large number of members were unseated at the election, including the most prominent members of the Manchester School, and some Conservatives, who for other reasons were dissatisfied with the tangle into which their leaders had led them.

The new parliamentary situation led to difficulties in forming a Ministry. Lord Derby declined to take office, and the Queen, after inviting Lord Granville to form a Ministry, at last had to accept Lord Palmerston, whom she disliked and felt to be dangerous. I have been careful to note the political condition of the time, as this election was the first in which I took an active part.

Gladstone was by no means satisfied with Palmerston's general policy, and supported his brother-in-law, Sir Stephen Glyn, in contesting Flintshire against the Hon. J. Mostyn, who stood in the Liberal interest. Had the contest been really between Liberal and Tory policy, my brother would have supported Mr. Mostyn, but Gladstone's policy, particularly on questions of finance and economy in expenditure, was in our view most important to support at this time, as it coincided with the policy of such Radicals as Cobden and Bright. At that time each party on nomination appeared on the hustings, and the candidates addressed the electors. I, together with my brother Richard, the Mayor of Flint, appeared on the side of Sir Stephen Glyn, immediately behind Gladstone.

It was a curious sight to see the great orator, and member for Oxford University, who had charmed the House of Commons by his eloquence, addressing a mob



of Welsh miners, who would not listen to him, and who carried about lighted candles, symbolising his High Church proclivities, calling him a Jesuit in disguise, a Puseyite, and a traitor. Sir Stephen Glyn was, of course, defeated, as the county was essentially Liberal.

In January, 1858, an attempt on the life of Louis Napoleon and the Empress was made by Orsini, by throwing grenades filled with explosive powder at the carriage, close to the Opera House. The Emperor was but slightly injured, but the French Military party for this incited the Emperor to demand England to take steps against the foreign refugees in England. Lord Palmerston brought in a Bill to make the offence of conspiracy to murder a felony, instead of only a misdemeanour. The Conservatives joined the Liberals and the Peelites in an amendment which resulted in the defeat of the Government.

Lord Derby was asked by the Queen to form a new Ministry, but being unable to obtain the co-operation of the Peelites, he was placed in a great difficulty, but his Ministry survived till 1859, when, with a view to strengthening their position Mr. Disraeli introduced a Reform Bill, and was defeated on an amendment introduced by Lord John Russell and supported by Lord Palmerston, calling for a larger extension of the suffrage in towns.

This led to another dissolution of Parliament, but the issues before the electors were complicated, and the Government of Lord Derby was defeated in the new Parliament by a majority of thirteen, upon which, after some delay, Lord Palmerston was asked by the Queen to form a Ministry. This he succeeded in doing, but Mr.

Cobden declined to accept office under Palmerston, and Gladstone accepted the Chancellorship of the Exchequer.

I have already said that about 1857 I joined the Council of the Financial Reform Association. The principal object of the Association was to continue the policy of the Anti-Corn Law League, resulting in the repeal of all Customs duties on corn, and of the substitution of an increase of direct taxation, a policy which was partly favoured by Mr. Gladstone, and to a great extent by Mr. Cobden and Mr. Bright.

With a view to a political application of this policy we held a large meeting at Bradford, with Lord Brougham in the chair. A petition signed by the chairman on behalf of the meeting asked for the abolition of the Customs duties on a large number of articles, including silk manufactures and many other articles imported from France, thus reducing the number of customs very considerably, and carrying out the principle of "Free Trade."

Mr. Cobden, who after his defeat at the election of 1857 was returned in 1859, landed in Liverpool from the United States in 1859, and was met by a deputation of the Association, which presented an address asking his support to their petition. In his reply Mr. Cobden used these memorable words: "I believe your principles to be sound, entirely sound in principle as the repeal of the Corn Laws. I agree entirely with you that the man, or body of men, who could procure the abolition of the Customs and Excise Duties of this country, or any country, would be the greatest benefactor the country could possibly have." At the same time Cobden had been asked by Lord Palmerston to join his Ministry, which he declined.

The defeat of the Conspiracy Bill following the attempt on the life of the Emperor, caused great excitement, which led to the Volunteer Movement in England, and to strained relations with France, together with great activity in the increase of the French navy; and a naval scare ensued, together with rivalry in the construction of ships—very similar to the position as regards Germany for a few years before the present war. Mr. Cobden, who was strongly in favour of peace and goodwill among nations, and of economy in public expenditure, after some negotiations with Monsieur Chevalier, an ardent French Free Trader, laid the foundation for a commercial Treaty with France. In this he was warmly supported by Gladstone.

The French Tariff was strongly Protectionist, and in many cases prohibitive, and the English Tariff still levied duties on many articles which France was able to supply. The most important of these were wine and silk manufactures, and many articles of vertu requiring artistic treatment. So far as duties were concerned, the Treaty provided that on the part of France no duty should exceed thirty per cent *ad valorem*, and England agreed to reduce the duties on wine, and abolish the duties on many other articles of French manufacture. This, of course, required the consent of the House of Commons, and led to the famous budget speech of Mr. Gladstone in 1860, which carried out to a large extent the policy of the Financial Reform Association. If, under the general terms of the Treaty, the maximum duty of 30 per cent *ad valorem* had been levied, there would have been little prospect of any large increase of trade between the two countries, but the French Government had agreed

to examine carefully the effect on trade by receiving evidence to be laid before the Conseil Supérieur de Commerce, before the specific duties were agreed to.

In the chemical products in which St. Helens, Widnes, and Newcastle manufacturers were interested, the existing duties particularly on articles derived from salt, were practically prohibitive, and our own export trade with France was very small. A meeting of Lancashire manufacturers was called to confer upon the steps to be taken to secure better terms under the Treaty, and it was resolved to make further inquiries, for which purpose Mr. Holbrook Gaskell and I were appointed as delegates to proceed to Paris and report to a future meeting. Mr. Gaskell not speaking French, most of the work fell upon my shoulders.

When we arrived in Paris we waited on Mr. Cobden, who received us very kindly, and said he was prepared to support us in our efforts to obtain more favourable terms, but it would be necessary to compare the cost of manufacture in England and France, and to support our views by evidence before the Conseil. I told him I was prepared to do this, as I was intimately acquainted with French chemical works, and could support any figures I used in making up the costs. I then suggested to Mr. Cobden that the guiding principle adopted by the French Government was to reduce the cost of raw materials or *matières premières* to the French manufacturers, and as what we manufactured came under the category of *matières premières*, used in the making of glass, soap, paper, and textile fabrics of all kinds, and really the basis of all manufacturing industries, I thought it might assist him in his negotiations if I could obtain

petitions from consumers, asking that these articles should be admitted free, or at a very low duty.

Mr. Cobden was much taken with the suggestion, but was surprised when I said I would visit Rouen, the headquarters of Protection in France, and hoped to obtain signatures there. Following up this policy, I prepared a petition to the Emperor, and visited many firms engaged in the making of soap, paper, and glass, succeeding beyond my expectations, much to the delight of Mr. Cobden.

In the course of my visits I had very amusing experiences. In some cases I was rudely turned out of the office, but in the case of a lady manufacturer of soap, who managed the business of her deceased husband, she at first refused to sign the petition, as she was against the whole Treaty, saying it would raise the price of French wines. I then politely asked her to let me know how much wine she consumed in her household and how much soda she used in her works. She gave me the figures, and I then and there made the calculation as to the enormous saving on her consumption of soda compared with the probable increase in her wine bill. On seeing the figures she at once consented to sign the petition.

The French chemical manufacturers employed Monsieur Peligot, chemist to the Chamber of Commerce and Exchange in Paris, as their representative, and I had several interviews with him to verify my figures, as he had made a counter-statement, increasing, of course, the cost of production in France. I was, however, able to show him where his figures were too high, as he had no experience in manufacturing chemicals.

These investigations occupied about a month, which we principally passed agreeably in Paris, where Mr. Cobden kept open house in the Champs Elysées, and invited us to his evening receptions once or twice a week, where we met most interesting people, both French and English. Among the French celebrities was Monsieur Emil Olivier, a young man who had joined the Liberals in opposition to the despotic system of the Emperor, but also a strong Free Trader and supporter of the Treaty. His future career was very brilliant, but in the unfortunate war of 1870, when he had attained to the position of Premier, his reputation suffered owing to the rhetorical statement that when the war broke out everything was ready, even to the last button on the soldiers' uniforms, or words to that effect.

When our work was completed, we returned to Liverpool and reported to the Alkali Association. Mr. Allhusen, on behalf of the Newcastle makers, proceeded to Paris later in the year, and I accompanied him and gave evidence before the Conseil Supérieur, asking that the duties, if any, should not exceed ten per cent.

The French makers resisted, declaring that unless the full duty of thirty per cent were imposed, their French chemical trade would be ruined. Up to the very last the decision was uncertain, and Mr. Cobden took me aside and asked me whether a higher duty than ten per cent would be acceptable to us. I told him frankly that ten per cent protection was ample, and referred him to my figures. After a severe struggle the matter was compromised, and the duties agreed to were fifteen per cent, to be reduced to ten per cent in 1864.

CHAPTER VIII

IT will be seen that a large portion of my time in 1860 was taken up with public affairs, but this did not prevent much taking place which influenced greatly my future career.

I have already mentioned that one of my most intimate English friends was Samuel McCulloch, who had studied in Heidelberg and was called to the Bar of the Middle Temple, where he had rooms. On my frequent visits to London I stayed with him, and together we visited the family of Mr. Thomas Baines, formerly a proprietor of the *Liverpool Times*, but now employed as Parliamentary Agent by the Liverpool Corporation.

In the late summer or autumn I asked my sister Emma to invite the two elder daughters, Frances and Eliza Baines, to Seaforth, and very soon Frances and I were engaged to be married. But changes in our family did not end there, as, soon after, my sister became engaged to Dr. Harley, a friend of mine who had studied in Germany.

In 1859 Mr. King, a Scotchman, settled in Australia, commenced the manufacture of wine in that country, and consulted Baron Liebig on the subject. By means of an introduction from Liebig, my sister Julia, who after her marriage to James Blake in 1851, had gone to Australia and settled in Sydney, became great friends with a Mr. Lang, whose brother married Jane

Blake in 1856 or 1857, and, together with James Blake, took over the vineyards of Mr. King.

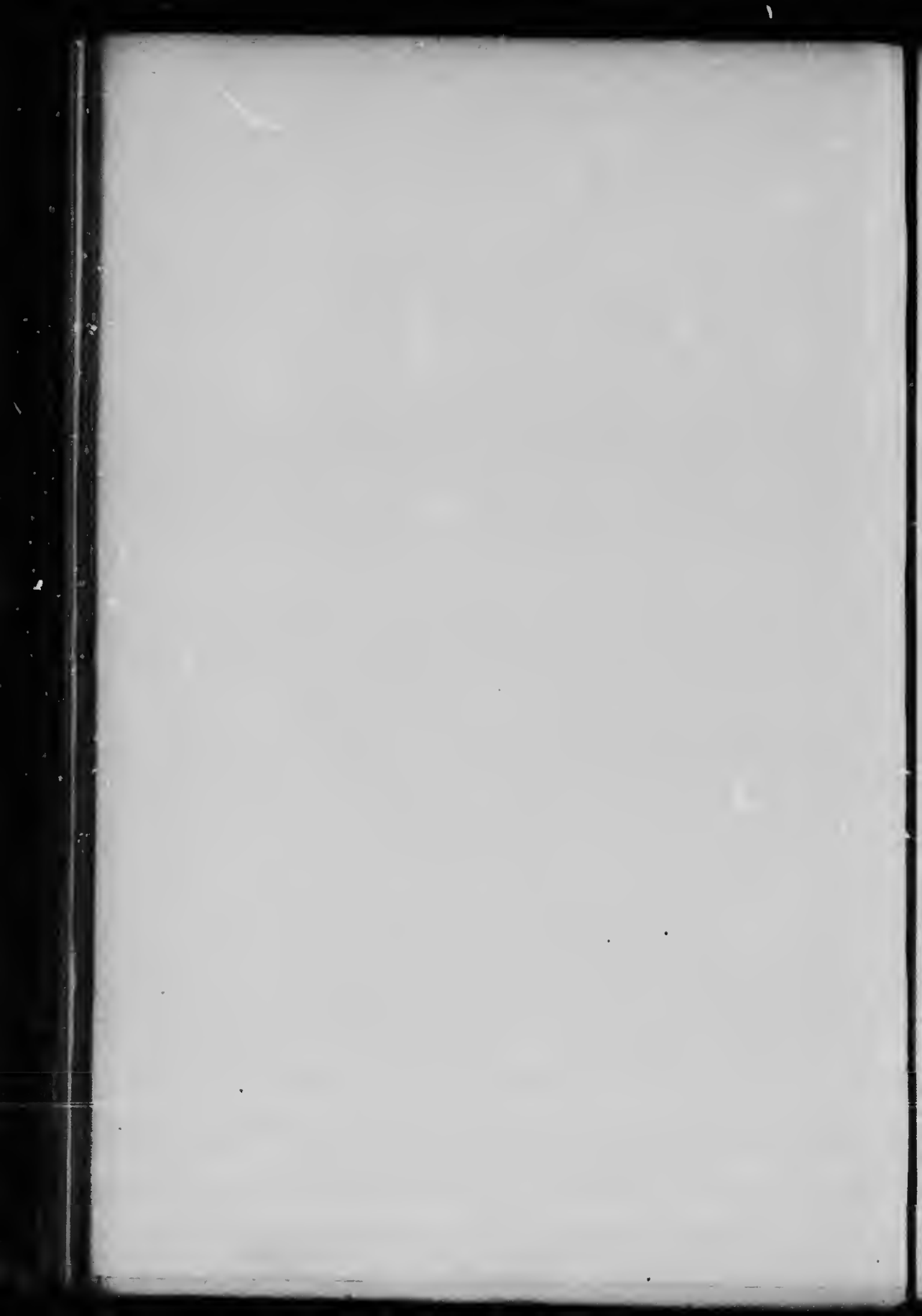
In the year 1859 Mr. and Mrs. Lang returned to England, bringing with them a Miss Nessie Caswell, a sister of Henry Caswell. Miss Caswell was a beautiful girl about eighteen years of age, and, like all Australians, brought up in the country, a splendid horsewoman. She visited us at Seaforth, and we became very intimate, as I took long rides with her. My sister Emma invited the Langs to spend the Christmas of 1860 at Seaforth, where Sam McCulloch, who formed one of our large house party, fell in love with Nessie Caswell, and early in 1861 after my wedding in February, when he was my best man, they became engaged, thus breaking up entirely our family circle.

The Baines family lived in a house called "Southfield Grange," near Wimbledon Park, and during my engagement to Frances I spent many delightful weeks there, and of course became still more intimate with the Baines family. As I was taking away their eldest daughter, I got Frances to sit for her portrait to Trautschold, in Fitzroy Square, London, and gave it to Mr. and Mrs. Baines. After their deaths it came into the possession of my wife, and is now at Seaforth Hall.

We were married on February 21st at the Parish Church, Wandsworth, and as this time of the year was not very pleasant in England, we decided to spend our honeymoon in Italy. We went first by easy stages to Paris, where we spent two or three days, then a long journey by rail to Marseilles, and on by steamer to Naples. Here at last we found bright sunshine, and resolved to stay at least a fortnight. We were very



FRANCES BAINES, AFTERWARDS MRS. E. K. MUSPRATT
From an oil painting by Trautschold



fortunate in finding very few English in the hotel, as most people were afraid to visit South Italy, owing to the disturbed state of the country.

The year 1860 was an eventful one for Italy, as during the autumn Garibaldi, at the head of his thousand volunteers, invaded Sicily, to the astonishment of all the Powers of Europe, conquered the island, and then crossed over to Naples, where with assistance at last of the Sardinian regular army, the whole of South Italy was joined to the North, under Victor Emanuel. The history of this marvellous campaign has been described by Trevelyan in *The March of the Thousand* and the *Making of Italy*.

The following letter to my sister Emma, written from Rome, describes our stay in Naples :

ROME,

Saturday, March 24th, '61.

MY DEAR EMMA,

Your kind letter of the 15th we found here on our arrival. I am sorry my short note to you from Naples was so long in reaching you, as you would begin to think me unkind for not writing, but the mails from Naples are very irregular, and I am afraid little better from this place.

We arrived here yesterday, came from Naples to Civita Vecchia by steamer, the passage pretty calm, but still a heavy swell on the sea which made the vessel roll.

We remained in Naples nearly a fortnight, and had a very pleasant time of it, the weather being generally fine. We visited all the sights, and one day went to Amalfi, which we did not see when you were with me. We took the train to the station beyond "La Cava," drove along

the coast for some time, and then turned round a headland into the Bay of Amalfi. You mentioned what a beautiful drive it was from La Cava to Sorrento, and you will be able to picture to yourself what a beautiful drive we had, when I tell you the coast on the other side of the headland is still finer, the sea forming innumerable bays, and the rocks assuming most irregular and grotesque forms, sometimes appearing like castles built into the sea.

We slept the night at Amalfi, and in the morning I walked, and Frances rode a donkey, up the mountains to Ravello, where we had a most beautiful and extensive view. The weather was splendid, and the sea and sky bluer than I ever before witnessed. The rocks sometimes form terraces which are planted with myrtles, olives, and orange trees, altogether forming a most charming picture. We did not go to Paestum, as the road is at present considered dangerous.

Of course we visited the Museo at Naples several times, and one day went to Capri and saw the Blue Grotto. We arrived rather late, that is after midday, so that the Grotto itself was not so blue as it is represented in the pictures, but the water was a most lovely cerulean blue.

We have arrived at Rome just in time for the Easter festivities, and I have no doubt will soon be tired of all the ceremonies. Spence is very kind to us, and has obtained tickets for all the festas. Mrs. Spence I have not yet seen, but shall most likely do so on Monday, as we dine there.

So your marriage is to come off very soon ; you know, dear Emma, that I wish you every happiness, and shall feel your loss greatly. We have been so long and intimately connected, that the rupture of the ties that bound us cannot be an unmixed pleasure, and had I not found one who will take your place, and whose love renders me perfectly happy, I know not how I should be

able to bear the separation. I trust that you will find in Harley as good and dear a husband as I have found a wife in Frances, but I trust although we can no more be *first* in each other's affections, we shall still love each other dearly, and that nothing may ever occur to lessen our affection. On your wedding day, my dearest Emma, my good wishes will attend you and your husband, and although I shall not be present in person, I feel I shall not be absent from your mind.

Our visit to Capri, alluded to in the above letter, was very enjoyable. Owing to the few strangers in Naples, the small steamer which during the season took passengers to Capri was not running. As I have said before, there were few travellers, and in the hotel only a small party of Germans with whom we became acquainted, and made several excursions together. The party consisted of a Prince, I forget his name, a Graf von, I think, Winzengerode, and a Berlin Banker, Magnus. We joined together in the hire of the small steamer and sailed to Capri. The sea was not very rough, but the unfortunate Prince was seasick and lay down in the cabin during the voyage. The others, including my wife, preferred remaining on deck, and the Graf and I sang German student songs to pass the time.

On arriving at Capri we could not approach the Grotto from the steamer, so got into a small rowing boat, the Prince remaining in the steamer. When we reached the grotto the sea was so rough as to make it difficult to enter, and we were obliged to wait until the waves receded, and slip in between the advance and receding of the sea.

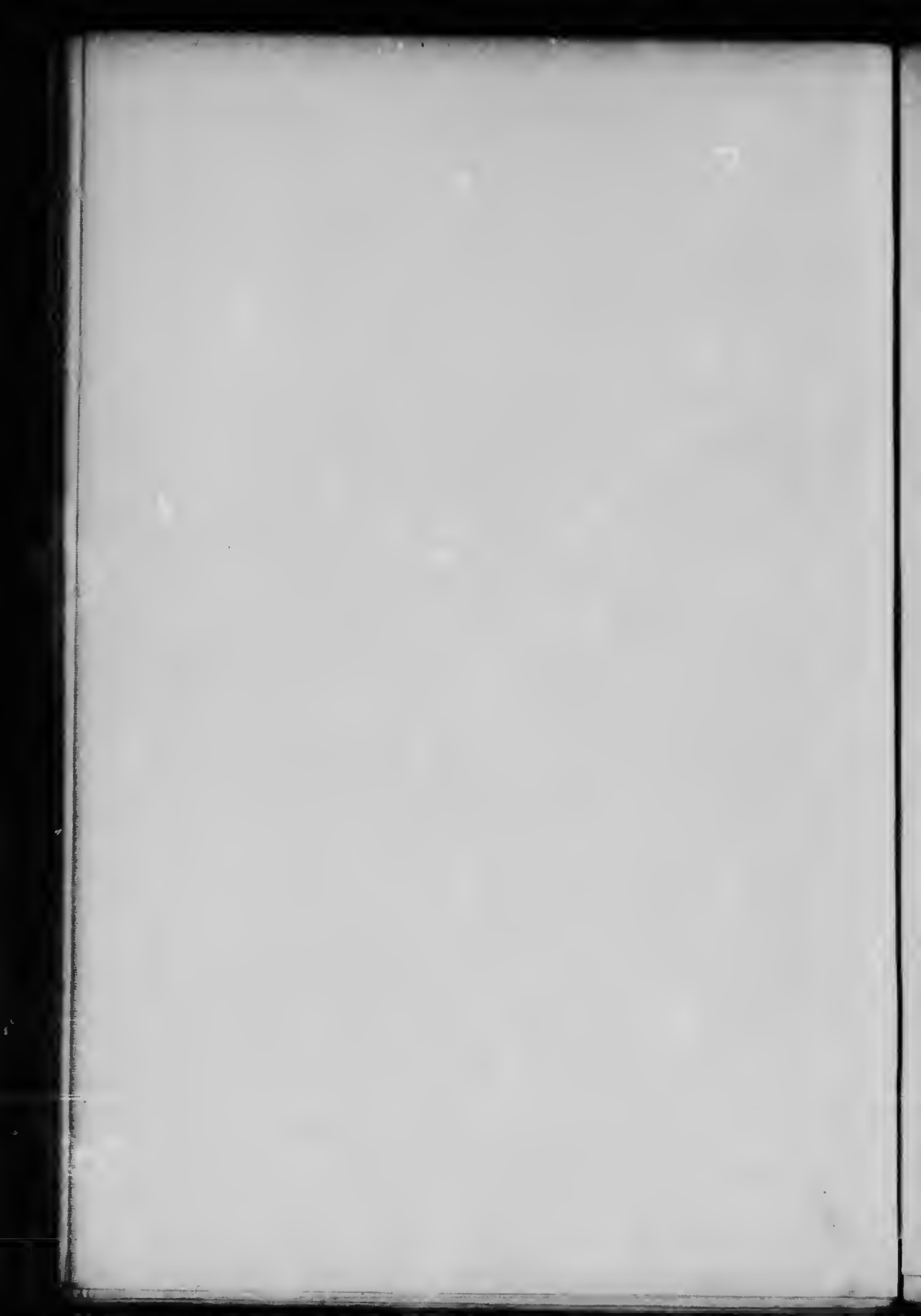
Magnus the Banker lost all control over himself and wished to return without entering, but my wife being

very wishful not to go away without seeing the beautiful effect of colour, of which she had read, showed great pluck, and poor Magnus had to lie down in the bottom of the boat, while we bent low so as not to strike the rock when the wave lifted the boat. Owing to the sea being somewhat disturbed, the colour was not quite as striking as it is in calmer weather, but still we all felt rewarded for the venture.

Rome we remained about three weeks. Here we called on Benjamin Spence, who had been a pupil of Gibson and now had a studio of his own. Spence's father was a partner with John Gibson in business in Liverpool. The latter attracted the attention of William Roscoe, who assisted him to go to Rome, where he studied under Canova, remaining there without returning to England for over thirty years, and Spence, who remained in Liverpool, sent his son to work in the studio of his old friend. In addition to the Spences we saw Gibson, Sir John and Lady Bowring, and one or two other interesting people. I had an amusing conversation with Gibson, on the colouring of statues. He had in his studio his Pandora, slightly coloured and with a fillet of gold in her hair, but his most famous experiment in this art was his Venus, which had raised a storm amongst art critics. He justified himself by claiming the authority of the Greeks for the practice. I quoted some opinions published by Dr. Forster, the German Professor of *Æsthetics*, but Gibson became very indignant, and with great vehemence said, "They are ignorant fellows, sir!" This, however, did not mar a very pleasant visit to his studio, where we admired several of his works. Modern writers decry all classical sculptors, Gibson among the



EDMUND K. MUSPRATT AT THE TIME OF HIS MARRIAGE IN 1861
From an oil painting by W. Trautschold



rest, but there can be no doubt that Gibson and Flaxman have executed most beautiful work in the classical style.

I think it must have been in Rome we first met Mr. Crowley. We became great friends; he was travelling in a large carriage, accompanied by a courier, and asked us to join him. This we did, leaving our luggage in charge of his courier, which for me was the only use I could make of a courier, and I much preferred travelling without one, except in Holland, where I spent a week, and in Spain, when I travelled with my wife and daughters, in 1895. From Rome we went to Florence, and through Pisa and Genoa to Turin. We took this route in order to see Garibaldi.

I have already spoken of the attack upon the life of Louis Napoleon in 1858, and the failure of the Bill introduced by Lord Palmerston to strengthen the law on conspiracy to murder. Although this was defeated in the House of Commons, and led to a change of the Ministry, Simon Bernard was tried at the Old Bailey for supplying the bombs or grenades to Orsini.

At the time feeling in England ran very high, on account of the demand of the French Colonels for a war with England for harbouring conspirators, unless the English Government gave up the conspirators who used this country for their plots against the Emperor. Bernard was defended by Edwin James, at that time the most successful criminal lawyer, who made a brilliant speech in defence, and Bernard was acquitted.

Edwin James afterwards accompanied Garibaldi's expedition to Sicily and Naples in 1860. Mr. Crowley had a letter of introduction to Garibaldi from Edwin James, and had arranged to deliver it at Turin, where

Garibaldi had gone from his retreat in Caprera, to meet Cavour, from whom he had been estranged owing to differences arising out of the war in South Italy, and the cession of Savoy and Nice to France, the Garibaldians proposing to drive out the French from Rome, to which Cavour could not agree.

Mr. Crowley asked us to accompany him to the meeting in Turin, which Garibaldi had appointed on receiving the letter of introduction. This took place in the morning, before Garibaldi met Cavour. We were conducted into an ante-room full of people waiting for an audience, and were immediately admitted. After passing through a few of his bodyguard in their red shirts, we were received by the General, and had a very interesting conversation, principally in French, for about half an hour.

He told us he never should forget what England and the English had done for the cause of Italy's unity and freedom from the Austrian yoke. He was especially grateful to Lord John Russell for his order to the English Fleet, not to interfere with his passage from Sicily to the mainland after the capture of Palermo. When we left, he saluted Mrs. Muspratt with a kiss, and shook us warmly by the hand. The noble bearing of Garibaldi and his winning smile and ways have been often described, and we left his presence very grateful for the opportunity given us by our fellow-traveller, Mr. Crowley, of seeing him, and on a very interesting occasion.

We left Mr. Crowley in Turin and proceeded to Milan and Venice. The Venetian territory was still under the Austrian government, and there were 40,000 troops quartered in the city, many of them in some of the palaces. There were very few people travelling, and on arriving

at the railway station we had no difficulty in finding a gondola to take us to the Hôtel de l'Europe, where we intended to stay. I talked to the gondolier, who was at first very silent and sulky, but I told him I was an Englishman and sympathised with Mazzini and the republicans, when he became very voluble in execrating the Austrians. On reaching the hotel we found it practically empty, only one other guest, an Englishman, at the table d'hôte. It was like a city of the dead, hardly any gondolas on the Grand Canal.

We, of course, went to St. Mark's and the Palace of the Doges, and at midday we sat at the Café Florian expecting to hear the Austrian Military Band, which played every day in the Square. We now witnessed a most significant sight. The Square was, when we entered, full of people, but the moment the Austrian band appeared every one fled and the place was emptied, with the exception of a few strangers who had come to hear the music.

We spent a few days in visiting the churches and galleries, then left by steamer for Trieste. From Trieste we took the diligence to Laibach, and then went by rail to Vienna, which I saw for the first time. There we visited Brandeis, a banker, and Professor Schrötter, the discoverer of red phosphorus, an allotropic form not so poisonous as the grey variety, and therefore used in the manufacture of matches. We found Schrötter a most interesting man in conversation, and enjoyed his hospitality.

From Vienna we went on to Munich, and stayed about a week with Baron Liebig. I had now an opportunity of introducing my wife to many of my old friends, who received her very kindly and were charmed with the beautiful English girl. As most of the young ladies

spoke English, there was no difficulty in carrying on a conversation in that language, and when we talked German my wife was able to understand, though not to speak it. We spent a pleasant week or ten days in that beautiful city, and returned to England through Paris, after a wedding journey of about three months. Finally, after staying some time at Southfield Grange, the house of my father-in-law, Mr. Thomas Baines, we returned to Seaforth.

CHAPTER IX

AS I have before said, great changes resulted from my sister and myself both being married. My father would have been left alone in the house, as my brother Richard could not conveniently leave Flint, he having the management of the works there, so it was finally decided that I should remain at Seaforth with my father, instead of taking a house of my own, which my wife would naturally have preferred. She dreaded the idea of taking charge of a large house and the inconvenience of living with my father and others of the family, who naturally paid him long visits.

On my return I had to attend to business, and my wife would have been left alone but, fortunately, we were able to have her sister, Lizzie, to pay us visits and cheer her up. My sister-in-law being of a very bright and sprightly disposition proved a charming companion to all of us, and on more than one occasion when my wife being tied with young children was unable to travel, her sister Lizzie accompanied me. My sister-in-law married later Arthur Forwood, leading partner in the now deceased firm of Leach, Harrison and Forwood. He was a man of great activity and energy, and even at this time took a leading part in the political life of the city. He became leader of the Conservative party in Liverpool and a member of the City Council, was elected Mayor

and was afterwards returned as member for the Ormskirk Division of South-West Lancashire.

On being appointed Secretary to the Admiralty by Lord Salisbury he was able to render great service to the country by the introduction of business methods into the administration, particularly of dockyards and ship-building, owing to his own experience as a ship-owner. In return for his services he was made a privy councillor and created a baronet. In politics we were diametrically opposed to each other, which did not, however, stand in the way of private friendship.

In November, 1861, my wife's mother, Mrs. Thomas Baines, died, and was buried in Wimbledon churchyard. I attended the funeral, but my wife was unable to travel to London, as she was expecting her confinement, which took place shortly afterwards. The child was stillborn, but my wife was spared to me.

We soon settled down to a quiet life at Seaforth. After my mother's death my father had become very unwilling to see any but very old friends, and there were few living in the neighbourhood. My sister and I used to visit a few, and among those we knew best were Mr. James Barclay Smith and his family, Mr. Bancroft, Mr. Baruchson, Mr. Mondel, and Mr. Gordon. They lived in Church Road, and Crosby Road.

Between the church and what is now the Vicarage, a few houses had been built on part of the Gladstone property, where Mr. Gordon, Baruchson and Mondel lived, but a change was about to take place, which resulted in the removal of many of these friends to Blundellsands. The estate belonging to Major Blundell, consisting of sandhills, was laid out for residential purposes, and the

land leased on favourable terms, so that Mr. Gordon, Mr. Baruchson, and later, Sir William Forwood, built their houses, and since that time, owing to good railway facilities, the whole area is covered by new houses, and Blundellsands, owing to its proximity to Liverpool and its good sea air, has become a favourite residence for people with large families, requiring of course large houses at a reasonable rate. As a consequence the old historic name of Crosby is almost forgotten.

Fashionable Liverpool society never settled in Blundellsands, and those able to afford it preferred the neighbourhood of Woolton and other suburbs. Owing to the distance very little intercourse took place, and society round Seaforth was dull and uninteresting. The only social functions were formal dinner parties, and most of the people one met had few tastes outside the business in which they were engaged.

Under these circumstances, when my wife and I settled down in the neighbourhood we did not extend our visiting list. Happily my wife had no particular love for society, and we naturally sought relaxation in visits to London and travelling on the Continent. I shall give a fuller account of these visits later on.

Sam McCulloch, who had been called to the Bar of the Middle Temple in 1854, removed on his marriage to Liverpool, and formed, with Mr. Gully, afterwards Speaker of the House of Commons, and Mr. Dunnet, and a few others rather younger, the whole of the local Bar, very different to what it is to-day. The Northern Circuit was then in its glory, and when the assizes were held in Liverpool, I made the acquaintance of several barristers, D. M. Littler, J. B. Aspinall, and others, who

often spent the Sunday with us. They were all intelligent men, and our discussions were often lively and interesting.

Now, to touch upon the course of politics in England. Palmerston's Government had become popular on account of its foreign policy and the support given to it by the cause of Italy, but as the Prime Minister himself was opposed to any further extension of the franchise, and Gladstone was engaged in questions of the extension of the Free Trade policy of the Manchester School, and Financial Reform, Lord John Russell's desire for a new Reform Bill, extending the franchise to a moderate extent, but not very democratic, was unsuccessful, and nothing was done. As a consequence there was general political apathy in the public mind, and the outbreak of the American War after the election of President Lincoln, brought public opinion to a high state of excitement, to the dropping of interest in home politics.

What occurred then is now almost forgotten, but during the whole period of my political life I do not recall a time when the stress of feeling was more marked. The governing classes as a whole hated the American Republic, as the Government of the United States under the influence of slave power at Washington had estranged the people of the country from friendly feelings towards their brothers the other side of the Atlantic.

With the outbreak of war one might have expected that England would have sympathised with the party which had replaced the one which had been the cause of ill-feeling amongst our people, but the representatives of the upper classes in the House of Commons thought this war was a grand opportunity for denouncing democracy and all its works. Sir Bulwer Lytton, in a memorable speech,

said the American Republic had burst ; and when, as a result of the war, our supply of cotton from the Southern States was menaced, the whole Press power of London with the exception of the *Morning Star*, and even the provincial Press, at once espoused the cause of the Secessionists, on the ground of the right of self-government, not caring what became of the slaves whose emancipation they had for years been advocating, and their attitude grievously offended many of the best Americans who had always admired England.

Curiously enough, most of our journalists were absolutely ignorant of the conflict which had been continued for years between the democratic and republican parties on this question of slavery, and their articles were full of the most ridiculous statements as to the feeling of the people of the North, fondly believing the war would be of short duration, because at the outset the North was less prepared for war than the South. The battle of Bull Run seemed for a moment to justify the opinion of the English Press, but they were speedily disenchanted, and they now endeavoured to rouse hostile feeling against the Federal Government, which was also strengthened by the arrest of Mason and Slidell in the *Trent*, and the interest of certain parties in raising the blockade.

The feeling in Liverpool was naturally even more acute than in the country, as it was from Liverpool the blockade runners carried on the trade of furnishing the States with manufactured materials, bringing back cotton for the manufacturing districts. Here the question aroused the bitterest feelings against the United States, and amongst the frequenters of the Exchange there were hardly more than a score of members who

dared oppose the general opinion. A meeting was called to consider whether England should not openly side with the South and break the blockade, and this was attended, among others, by Mr. Spence, whose letters to *The Times*, under the signature "S," were greedily devoured, as they showed that he, at least, knew more about the United States than the writers of articles in *The Times*, who absolutely ignored the moral forces at work in America. Mr. Spence made a good speech at the meeting, but he was followed by Mr. John Paterson, with an even better knowledge of American opinion than Mr. Spence, whose so-called facts he shattered, appealing to the better feelings of the English, even if the emancipation of the slaves should for a short time keep the price of cotton high.

At the end of the meeting I told Mr. Paterson I was ready to do my best to support him, and asked what he proposed to do. He told me there were a few members of the Corn Trade, including Mr. Trimble, who wished to form an association for the purpose of educating the public on the question, and they were joined by Mr. Birrell, a Baptist Minister, father of Augustine Birrell, C. E. Rawlins, Junior, a prominent Liberal, and a Mr. Jones, a member of the Church of England, who on moral grounds were willing to help. I may perhaps here mention how and why I was ready to take an active part in the movement. Owing to my intercourse with American students in Germany, where they often discussed American politics, I was frequently present, and took part in the discussion. Some of them thought it not desirable to speak out freely upon their differences in the presence of an English-

man, but they waived the objection in my case, and I in this way became acquainted with the whole course of American politics for the six or seven years prior to the election of Lincoln. In fact I had studied the political situation in the United States more carefully than the majority of Englishmen, and in Liverpool, when discussion turned on American affairs at a dinner-table where I was the only one taking the side of the North, I was able to confute their arguments owing to my superior knowledge of the antecedents of the war, and when the redoubtable Mr. Spence was present, I was able, to his astonishment, to silence him also, to the surprise of the gentlemen present who knew little of the merits of the case.

The gentlemen above named formed a small committee which kept the Liverpool public informed of the progress of the war, which at first, as indicated by President Lincoln and Mr. Seward, was waged in defence of the Union only, as interpreted by the written Constitution of the United States, but which during its progress must necessarily lead to the emancipation of the slaves. Whatever might be the result, even the democratic party in the North were in favour of limiting the right of holding slaves to the existing States, but advised its prohibition in all new territory which might, under the Constitution, be admitted to the Union.

I have already said that in the Press the majority of the daily papers supported the South, but, to the honour of Liverpool, where there were three daily papers, the editor of the *Daily Post* supported the North both on moral and political grounds. He had the foresight to see that in the end the North, owing to its superior resources,

both in wealth, education, and intelligence, must prevail.

At this time I began a correspondence with my dear friend Horace Howard Furness, whom I had known as a student in Munich, and the following letters from him to me will explain the position I took in England, in conjunction with a small band of sympathisers with the North, in Liverpool.

PHILADELPHIA,

June 24th, 1863.

MY DEAR OLD FRIEND,

I can't tell you how glad I am to hear of you once more. Your letter of January 27th to my father I received only a few days ago. I have been away from home nearly the whole winter, only returning for a day or two at a time, and as your letter came during one of my absences, it quite slipped my father's memory. He begs me to present to you his apologies, with the assurance of his intention to acknowledge its receipt, but which the anxiety and excitement of the times caused him to forget.

Of course, you dear fellow, I was not surprised to hear that you fully sympathise with us in the present struggle. No true-minded man could do otherwise. It is the battle of liberty against Slavery on as true an issue as the world ever saw. We were slow to believe it, but every day that the war is prolonged is opening our eyes. To me the struggle is unspeakably grand; it has given me a country. From the first uprising of the people after the attack on Fort Sumter, I have been joyous, proud, happy, and exhilarated. It takes a century of peace to educate a nation, and we have gained a century's experience in two years. No greater misfortune could have happened to us than to have been enabled to crush this rebellion at the outset. The compromises of the Constitution would have been

re-enacted with a hundredfold rigour. And now every hour that the war lasts diminishes, thank God! the prospect of such a termination.

But, my dear Muspratt, we have been grieved at England's conduct. We certainly had a right to expect a different course from a nation that had abolished slavery and the slave trade. Madness seems to have seized the rulers of England. They seem to have been doing their best to alienate our respect and friendship. At times it seems to me as though our feelings were not so bitter against the South as against England. The Southerners are so manifestly what their circumstances have made them. But there is no such excuse for England. Of course, I have grand friends in England, and thank God for John Bright, Francis Newman, John Stuart Mill, and yourself.

We are now all excitement over the threatened invasion of the North. In me it causes no alarm. I am not so sure that the loss of Harrisburg, Philadelphia, or even Washington, might not be the best thing for us. We have not yet begun to feel the war, that is in our outward circumstances. Of course our hearts have been wrung by the loss of dear friends. Did you know of poor dear Savage's death? He was Lieut.-Col. of the 2nd Massachusetts, and lost an arm and a leg at the battle of Antietam last September, and died a prisoner in Richmond. He fought gloriously, and was idolised by his regiment.

But, my dear Muspratt, let me know something of yourself. What are you doing? Do you still live at Seaforth Hall? Commend me most respectfully to your wife. As for me, I have been married these three years, and have a little son two years old. *Voilà tout!* Blight sends you a great deal of love. Do let me hear from you soon, and, believe me, my dear Muspratt, with great love and regard, your old friend,

HORACE HOWARD FURNESS.

PHILADELPHIA,

Aug. 31st.

I cannot tell you, my dear Muspratt, how heartily I welcomed your letter of August 14th, which reached me day before yesterday. It gave me a flood of light when all had been dark. It's very hard to keep your faith alive without nourishment. I knew that John Bright couldn't be the popular man he is without having crowds of adherents, friends, and followers, who think and feel as he does, but then we hear so little from them, and every newspaper in the United Kingdom, except the *London Star*, seems to have joined in the howl against us, urged on by such men as Thackeray and Carlyle!

I declare my faith was flickering, but what you say about the Lancashire operatives is so grand that it inspires it anew, and I continue to hope for England for their sakes and for yours.

It was indeed a gloomy time when I last wrote to you. For two days before, Meade's army had come up to Lee's, and when the latter seemed to carry everything before him, I confess I felt a little depressed, not for the ultimate triumph for the cause, but for the fate of the dear city of Philadelphia, and for the fate of my own family, my father, a well-known Abolitionist, North and South, and who would not, of course, as would none of us, have left the city had the rebels entered it.

But, *nous avons changé tout cela*, and all things progress grandly. And that rebel invasion turned out a great blessing, as does everything which reveals the monstrous character of the Rebellion. No greater misfortune could have befallen the country than a triumph for the United States at the first battle at Bull Run two years ago. With every defeat we have made an advance, and at last the first sentence of the Declaration of Independence that all men are born free and equal.

dawning upon the minds of the nation as a great truth.

Had we been victorious in our first great battle, the Rebellion would have been crushed and the South restored to its old position, with fresh guarantees for slavery, and the country would have been doomed; but, thank God! it was otherwise, and that same fervent ejaculation I have uttered after every defeat until the eyes of the North were opened to the nature of the foe that had assaulted it, and it was clearly seen that it was slavery and nothing else. Then, too, the North had to learn that slavery had to be hated not only for its horrible effect upon the poor slave, but for its worse effect upon the master, transforming men polished in manner, and refined in intellect, into very demons and fiends.

Southern chivalry is never spoken of now but with a sneer and men now are beginning to discern that slavery works the steady and sure decay of all courtesy, all morality, and honour and religion. For myself, I can only feel profound commiseration for the Rebels—victims of circumstances. They could do more than becoming what they are than they could stop the growth of their bodies. It's a good thing in a nation given over to matter-of-fact commerce, to begin to have faith in an immaterial idea, the idea of liberty, and to realise the truth of what Lessing said, that "he who binds a chain round a fellow-man binds the heaviest end round himself."

Indeed, my dear Muspratt, the times are to me full of cheer, and have been so from the very first. The gloomiest time of my whole life was the winter preceding the outbreak of the rebellion, when we seemed to be splitting up into numberless factions, all of us to become the easy prey of the South. But the good God was working silently, and all of a sudden one cannon from Charleston turned us all into one nation with a heart beating for our country.

Then for the first instant in my life I had a country, one where I dared think, and speak, and not the vile mockery of a republic that we had before.

Could anything have turned out more grandly than the New York riots? Those poor negroes were as truly martyrs for the nation as any that have fallen on battle-fields; the glare of their burning houses revealed the character of the mob, and showed its Southern origin.

Everywhere else the draft has been carried out, only quietly, but in many places, as, for instance, here in Philadelphia, with hurrahs and with the whole crowd singing the "Star-Spangled Banner" at the close of each day's proceedings. It is said that the army of the Potomac is reinforcing with their conscripts at the rate of a thousand per day. Everything looks bright. Charleston, I expect, will hold out for some time, and from Vicksburg we have learned patience.

But my time is more than up, and I have a thousand things that I want to talk to you about, a letter is so very unsatisfactory.

My brother William is far from well. His nature is very excitable, and these times have fairly worn him out. He has gone with his wife and little girl, three years old, to Massachusetts, where, in perfect quiet, he hopes to restore his health. My younger brother is a captain of cavalry, and has been in the field from the first.

I have a little boy, Walter, some thirty months old.

Blight is not married, tho' he wishes he were; he is off to Rhode Island for a few weeks.

I enclose you a photo, which tells its own story, and which you may do some good with. God bless you for all you are doing. Do write soon again, and believe me,

My dear Muspratt, yours affectionately,

HORACE HOWARD FURNESS.

P.S.—The photo is an instance of Carlyle's "hiring for life."

As the war progressed, and it became evident that it must inevitably lead to the emancipation of the slaves, the Union and Emancipation Society was formed, with Mr. T. B. Potter as Secretary, afterwards Secretary of the Cobden Club. He was supported by Mr. Bright, Mr. Cobden, John Stuart Mill, and Professor Cairns, who wrote an admirable book on the Economic Evil inflicted by the slave power, where the cultivation by slave labour led to the speedy exhaustion of the soil, causing the desire for new territory for the growth of cotton and tobacco to replace the exhausted lands of the Eastern States.

For four years the war continued, and at one time the end seemed so remote that Mr. W. E. Gladstone made a speech in which he said that Mr. Jefferson Davis, President of the Southern Confederation, had founded a nation which naturally would have to be recognised by the European States. The tide was turned by the battle of Gettysburg and the taking of Vicksburg, and in 1864 ended with the march of General Sherman through the Southern States to Savannah, and the surrender of General Lee to the Federals under General Grant.

Thus ended the war, but the bad feeling which was engendered by the escape of the *Alabama* and other vessels of war from England, and the capture of vessels engaged in commerce with the United States, which lasted for years, was only settled by the arbitration of Geneva, and the payment by England of three million pounds damages.

CHAPTER X

TO come back to home affairs. The Ministry of Lord Palmerston, with Mr. Gladstone as Chancellor of the Exchequer, led to the further progress of Financial Reform and the principles of Free Trade. Commercial treaties on the lines of the French treaty were made with other nations, including Germany, Belgium, and Austria. The latter treaty was negotiated in 1864, when I was appointed by the Liverpool Chamber of Commerce to support our Ambassador, and Mr. Hutt, who represented the Board of Trade, in discussing the new Austrian Tariff.

I reported to the Chamber that unless there was a great change in the Austrian Government, and the education of the Austrian and Hungarian people, there was little prospect of any great increase of trade, even if the tariff were reduced. I could not, naturally, foresee the war between Prussia and Austria within two years, but I indicated the great superiority of Prussia over Austria owing to the superior education and energy of the people, and the consequent increase of industry and trade in that country.

At this time the London Press always spoke of Austria as our old ally and good friend, and fostered ill-feeling against Prussia, with which country our commercial interests were far greater. When the war broke out in 1866, of course *The Times* and most of the London papers

took the wrong side and predicted the speedy success of the Austrian army. Much to their disappointment, all their predictions were falsified by the success of Prussia at Sadowa.

In 1864, about the month of September, Lord Palmerston died, and a renewed interest in Reform was aroused by the speeches of John Bright. Up to the present I had taken very little active part in political life, except in the direction of the extension of the freedom of trade, and improved administration of all the services of the Government, including the army and navy. So long as Palmerston lived any substantial extension of the franchise was impossible, but Mr. Bright's agitation on the question gradually aroused the interest of the electors, and the example of self-restraint on the part of the workmen in the manufacturing districts during the war in America, when, owing to the blockade, they were thrown out of work, and many of them starving or suffering privation, might have roused up a feeling in this country for intervention in the struggle, greatly impressed all thinking men and public opinion, and the old argument that working men were unfit to exercise the franchise fell to the ground.

The movement became so formidable that when the Tories came into power under Lord Derby and Disraeli as leaders, they were forced to bring in a bill for the extension of the franchise, which was so altered in its passage through the House of Commons that it used to be said that nothing was left but the word, "whereas," in the preamble. The Lords, under the leadership of Lord Derby, accepted the Bill, which he called "a leap in the dark."

With household suffrage in the large towns, reconstruction of the Liberal party became necessary, and for the first time I took an active part in purely party politics and organisation. My work in connection with Financial Reform and the Chamber of Commerce, led me to the study of the various legislative measures dealing with industrial and commercial questions. I gave evidence before the Committee on Patent Law, on International Coinage, and on the subject of Railway Rates.

In the year 1862 a Bill was brought in to deal with the escape of noxious gases from Alkali Works, which led to the firmer establishment of the Association which had dealt with the French Commercial Treaty. This was the beginning of the Alkali Association, with a paid secretary in London, who acted as Parliamentary Agent, and which had a permanent influence on all subsequent legislation on manufacturing nuisances, and the pollution of rivers. The principle adopted by the Association was not to oppose a blind resistance to legislative interference with Industry, but to guide and direct it on right lines, by suggesting practical means under scientific direction. Most of the principal Alkali makers had a scientific training in chemistry, and were able to get the co-operation of men of science in framing laws, which would not interfere unduly with manufacturers, to reduce the escape of noxious gases and liquids flowing into streams, so considerable as to prevent the damage which had up to that date been caused by the growth of manufactures.

The Alkali Act dealing with noxious gases has been entirely successful, and for fifty years has only required slight amendments. The Pollution of Rivers Act has

taken longer to carry into satisfactory operation, but has already effected great improvements, and is also conducted under scientific supervision. If the prevention of black smoke had been dealt with in the same manner, our towns would to-day be much cleaner; but all that has been done has been to pass laws which could not be carried out effectually, except by the aid of science, and the loud denunciations by Mr. Ruskin and other artists were ineffectual because they ignored the necessity of calling science to their aid.

I have already described how I spent my life when settled down at Seaforth Hall, and the lack of congenial society in the neighbourhood, but as I was fully occupied for the years 1861 and 1862 in the management of the old works at Vauxhall Road, and our Liverpool office, I was too tired in the evenings to seek relaxation in going to theatres and concerts, and spent most of my evenings in studying Political Economy and History.

At this time Buckle's *History of Civilisation* had created a great sensation. In his introduction he points out that while only the military and political accounts of all European and many other countries have been carefully compiled, and great attention has been paid to the history of legislation and religion, less labour has been given to the progress of science, literature, and art; also that though much knowledge of ancient civilisation has been gained by archæologists, history as a whole has not been treated scientifically with a view of ascertaining the laws which govern the progress of civilisation. He then attempts to give a history of civilisation on those lines, viz. "that history is the modification of man by nature, and of nature by man," and is subject to general

laws which can be ascertained, thus leading to history as a science.

Of course this view was fiercely attacked by historians and literary men, but was supported by many scientists. The task which he set himself could not be completed by one man, and he died at an early age, leaving only three volumes, touching principally on the history of England, France, Spain, and Scotland. In spite of all opposition, he has profoundly influenced subsequent historians, and every history now takes notice of the influence of climate, geographical position, and environment, on the progress of nations. It is to be regretted that Buckle wrote most, if not all, before the appearance of Darwin's *Origin of Species*, including the doctrine of evolution and the survival of the fittest in the struggle for life, as this supported and strengthened Buckle's position.

I read and studied Darwin's works and the controversies with the churches and some scientists, who would not relinquish the explanation of the creation of species, or accept the doctrine of the survival of the fittest, as adequate to explain the origin of species in the animal and vegetable kingdoms. To me Darwin's works let in light on what had always been a puzzle when studying zoology and geology. These epoch-making works, together with many on political economy, notably J. S. Mill, Cairns, McLeod, Bagehot, and others, had a great influence on my mental development and political views.

I have already alluded to my several visits to London, partly for pleasure and relaxation, but also in connection with the many subjects of legislation in which I was interested. The most memorable event which took place

MY LIFE AND WORK

was the visit of Garibaldi to London in 1864. For spontaneous enthusiasm it exceeded any procession of the kind through the city, and, curiously enough, many of the better or aristocratic classes shared this feeling. A gala performance of *Masaniello* was given at Covent Garden, and seats in the stalls rose to three or four pounds. It was a grand and impressive sight when Garibaldi entered the box reserved for him, the whole audience rising to their feet and greeting him with prolonged cheers.

In recalling these days I am reminded of the great changes which have come over the Metropolis. At that time there were no grand hotels, as at present, conducted on the American or Continental plans. When I visited London without my wife I stayed at the Tavistock Hotel, Covent Garden, frequented by lawyers and business men often engaged in Parliamentary business. In the morning breakfast was very simple, boiled eggs, tea and toast, or ham and eggs cooked to perfection. There was no dinner, which I generally took at Simpson's in the Strand.

The only restaurant frequented by ladies was Verrey's in Regent Street, where French cooking could be enjoyed. Other restaurants kept by Frenchmen or Italians were never visited by ladies. As a rule, when my wife accompanied me to London we stayed with Mrs. Trautschold, the artist's wife, in Fitzroy Square. Here we met delightful society of artists, literary or scientific men, and had many pleasant musical evenings. A few young American girls who were studying singing, and others, boarded in the house, and it was here I first met Antoinette Sterling before she became famous. Her voice was a magnificent contralto,

and her method of singing very natural and dramatic. This was during the American War, and she was naturally a most intense lover of her country and a sturdy Abolitionist. We became great friends, as she was delighted to meet an Englishman who sympathised with democracy.

Antoinette Sterling was the kindest and most generous of creatures, but was even at this early period full of what are known as "religious cranks." For instance, although she took lessons from both Garcia and Randegger, she never studied music seriously, because she said she would only sing "as God willed her to," and the "will of God" proved most disconcerting to her fellow-artists in oratorio or concerted pieces. She used always to stay with us when she was singing in Liverpool, and her great delight was to go to the nursery, where, with half a dozen children sprawling about her, she would sing: "Baby bye, here's a fly" and other nursery favourites. Sometimes even when we had asked friends to hear her she would absolutely refuse to sing a note, whilst at other times she would spring up unasked and fill the room with her warm and velvety voice. She married a fellow-American, Malcolm Mackinlay, a music lover, who proved a most useful husband in conducting her business affairs, of which she was incapable herself. He suffered from insomnia and she would often sit up half the night singing soothing lullabies to him. After his death she became more and more of a mystic, and declared that she had nightly communion with him. They had two sons and a daughter, who have all inherited their mother's talent for music. Malcolm Mackinlay the eldest son is now a well-known teacher of music, and her daughter Jean (Mrs. Harcourt Williams) a most charming

ballad singer and *disceuse*. She is usually accompanied by her second brother.

Among painters, I met Wolfe, the great animal painter, Zwecker, also a painter of animal life, with many orders from the Zoological Society, but also for woodcuts illustrating books. One in particular I remember of Nursery Rhymes, in which Zwecker illustrated "Old Mother Hubbard," with a picture of the dog full of expression of his feelings when the cupboard was bare, Kämpel, the Maler-Sänger, as he was called, had a beautiful tenor voice, and for a time sang as a professional, but gave that up for painting. I may say something more about these artists later when I joined the Deutsche Kunstverein, afterwards the German Athenæum.

We also went to the theatre, as my wife was almost as fond of this form of entertainment as I was, albeit she came from sternly Puritan stock. I recollect with great pleasure the excellent actors of that time—Phelps, Charles Kean, G. V. Brooke, Webster, Buckstone, Fechter, Creswick, Robson, Wigan, Wyndham, Sothern, and many others. Among actresses whose debuts I witnessed were Marie Wilton (now Lady Bancroft), first playing in the burlesque at the Strand Theatre; afterwards at the Prince of Wales', with a brilliant company acting well together in Robertson's plays; Kate Terry, whom I thought at that time superior to her sister Ellen, but she was married very soon to Mr. Lewis and quitted the stage; Madge Robertson, afterwards Mrs. Kendal; Mrs. Stirling, splendid in *Masks and Faces*, and as the Nurse in *Romeo and Juliet*; Miss Marriot, Mrs. Wigan, wife of Alfred Wigan, one of the finest actors in light comedy, and many others.

I may of course be prejudiced, but as a whole I think they were superior to the actors of the present day, as they were trained before the days of long runs. The greatest genius of all was Robson. As an actor he most resembled Edmund Kean of a former generation, and had he devoted himself to Shakespearian Tragedy might have left as great a name, but the legitimate drama at that time did not pay, and he acted principally in burlesque. Ristori had succeeded Rachel as a tragic actress and appeared in London in *Medea*, a powerful play giving scope for her exceptional gifts as a tragedienne. In one act, in the flurry of her passion, she, with appropriate gesture, described a tiger pouncing on its prey. As was the custom at the time, the play was burlesqued with Robson in the part of Medea. Instead of the tiger springing and seizing its prey, Robson described and acted the part of a cat and mouse, but in so doing he rivalled the great tragedienne in his acting. I saw both and for my part appreciated both, and Ristori herself confessed that Robson's performance was a wonderful piece of acting which she enjoyed and appreciated.

When Irving brought out *The Merchant of Venice* and acted Shylock, Robson acted in a burlesque of the play in the part of the "Jew that Shakespeare drew," so naturally that he was considered by many as greater than Irving. As a rule, with Robson these parts were hardly burlesque at all, but were really powerful tragedies. In two other parts, Daddy Hardacre, a miser, and the *Porter's Knot*, a most pathetic play, he was wonderful, and we have never seen an actor equal to him or so original.

The Italian Opera at Covent Garden was then in its

glory. Grisi had just left the stage, but Mario remained. Tietjens succeeded Grisi and played the same parts—Norma, Donna Anna in *Don Giovanni*, and above all Fidelio. She had a splendid soprano voice and at the same time was a great tragic actress. In beauty alone was she surpassed by Grisi.

Two new singers appeared about this time—Patti and Nilssen, very different in looks and temperament. Nilssen a Scandinavian blonde, and Patti of Spanish type of beauty. Patti kept to the stage for a long time, but Nilssen retired early. Both were accomplished singers and actresses, but excelled in different parts. Nilssen's Marguerite in *Faust* and Lucia in *Lucia di Lammermoor* I shall never forget.

CHAPTER XI

IN Paris a great exhibition was held in the year 1867. Among the meetings which were held in connection with this exhibition a conference had been called to consider the internationalisation of weights and measures and coinage. This subject had been discussed by the Liverpool Chamber of Commerce, of which I was Chairman of the Home Trade Committee, and the Chamber had advocated the adoption of the metric system for weights and measures, and was in favour of the decimalisation of our coinage. I was therefore deputed by the Chamber to represent them at the Conference in Paris. So far the adoption of the metric system on the Continent and in South America had made great progress, and Germany also had partly changed its old system of weights and measures, but England, the United States of America, and Russia retained their old systems, though in England an Act had been passed permitting the use of the metric weights and measures. The Act, however, like so many others, was very defective and had to be amended thirty years later.

With regard to coinage, a Convention had been entered into between France, Spain, Switzerland, Italy, and Greece rendering the silver coinage in all these countries uniform, the franc or its equivalent containing the same amount of silver. With regard to gold coinage, in each

of the silver-using countries there were gold coins current to a limited amount, based on the relative value of gold and silver. In those countries where a double standard was in use, the relatively cheaper metal replaced or drove out the dearer in the currency of the country, and at the time of the meeting this had taken place in France, where even the heavy five-franc piece in silver had been replaced by a gold coin of five francs, which, however, was rather inconvenient on account of the smallness of its size.

At the Conference, the English Government was represented by the Master of the Mint, Mr. Graham a celebrated chemist, and Mr. Rivers Wilson, with the strict injunction, however, to do nothing which should in any way pledge His Majesty's Government. After much discussion a system was recommended for the coinage in each country of gold coins based on the ten-franc piece as the standard, containing nine parts gold and one alloy, as in the existing French coinage. The gold coins of five francs, ten francs, twenty francs, and a new coin of twenty-five francs, containing the same relative amount of gold, were to be international, and received at their face value in all those countries which were willing to accept the system. A Royal Commission was appointed by the English Government to examine and report upon the Recommendations of the Conference and their adaptability to the circumstances of the United Kingdom, and whether it would be desirable to make any, and what, changes in the coinage of the United Kingdom, in order to establish either wholly or partly such uniformity as the Conference had in contemplation.

I was appointed by the Liverpool Chamber of Commerce

as its representative to give evidence before that Commission. There was naturally a feeling in England that in order to comply with the conditions of the system suggested by the Conference it would be necessary to alter slightly the value of the pound sterling, as the alloy instead of being one-tenth, was one-twelfth of the gold in the coin, so that the existing value of the pound sterling was 25·20 francs, or 2d. more than the suggested new coin of twenty-five francs. Those who were willing to accept the new system thought that no alteration in the real value of the new coin as compared with the existing pound sterling would take place if a small sum for mintage or seignorage were charged by the Government to cover the expense of converting the bar gold into coin for currency.

The Royal Commission, however, in its report, suggested that so far as the United Kingdom was concerned it would be better to keep the pound sterling, and for the other countries, which already charged for seignorage, to make the necessary alterations in the value of the several gold coins they might think it necessary to use.

As for the United States, whose currency had been based upon gold, but who had at that time a paper currency, it would have been easy for them, when resuming cash payments, to make their new gold coin the equivalent of the pound sterling ; and in Germany, where the currency was silver, and a change had to be made a few years later when adopting the gold standard, it would have been much easier to enter into the international system than at present, when a new gold coin of twenty marks, which is of less value than the pound sterling, is in universal use. It is, I think, to be regretted that owing to the conservatism of England the proposed

international coinage fell through, as it was admitted that great advantages to commerce and industry, and the facilitating of the exchange, would have resulted from its adoption.

The Paris Exhibition of 1867 was much finer than that of 1855, and buildings for the purpose were erected on the Champ de Mars, an extensive piece of ground which had been used only for military purposes and reviews of the troops. When I attended the Conference I was alone in Paris, but later took my wife and her sisters, who enjoyed visiting the sights.

At that time Paris was at the height of its glory under the Second Empire. Baron Haussmann had commenced his great scheme for improving and beautifying the city. The old Rue des Capucines and Rue Basse du Rempart had been replaced by the Boulevard des Capucines, between the Boulevard des Italiens and the Madeleine. This Boulevard was the site on which had been erected the Grand Hotel on similar plans to the Hôtel du Louvre, but much improved, and the court at the entrance was dominated by a terrace in front, from which the lively scene of the stream of carriages bringing in guests, sometimes for a wedding banquet, was a source of much attraction to visitors at the hotel.

About this time my father had taken over from my brother Frederic the Wood End Works at Widnes, and I was consequently obliged to go there three or four times a week, where I had to superintend the erection and conduct of two new processes, namely, Weldon's process for the recovery of manganese and Ludwig Mond's process for the extraction of sulphur from alkali waste.

I have already spoken of the use of Mason's pyrites,

which came from Portugal, which we now use in all our works for the manufacture of sulphuric acid. The Tharsis Company, which exported a mineral of similar character, had been joined by several other manufacturers for the purpose of extracting the copper from the ores by a wet process, known as Henderson's process.

In order to secure similar advantages we started at Widnes, the Widnes Metal Company's Works, a small private company, of which I was elected chairman. Messrs. Philips and Claudet were on the board, and Mr. Philips was appointed managing director. We commenced the extraction of the burnt ore from Mason's pyrites, but in order to avoid the claims of Mr. Henderson we used an open instead of a closed furnace for the chlorination of the ore. Mr. Henderson, or the Tharsis Company, commenced proceedings for infringement of his patent, but was unsuccessful. A great improvement in the process of the extraction of the copper was made by Mr. Claudet's beautiful process for the extraction of the silver at a very small cost, although the amount of silver in the ore was only a few ounces per ton of ore.

It will be seen that at this time, in addition to any public work in which I was engaged in connection with the Chamber of Commerce and Financial Reform Association, I had also much anxiety in the management of the Wood End Works and in the conduct of the two new processes to which I have already referred. The extraction of sulphur from the alkali waste by the Mond process frequently gave rise to the escape of sulphuretted hydrogen, a most noxious and poisonous gas, to which I was necessarily much exposed during the years 1868 and 1869.

In 1868 I took part in the General Election in S.W.

Lancashire when Mr. W. E. Gladstone and Mr. Grenfell were the Liberal candidates. The election turned mainly upon the Disestablishment of the Irish Church, and although Mr. Gladstone was defeated in Lancashire he was returned for Greenwich, and the Tory Government, under Lord Derby and Mr. Disraeli, resigned their office, and Mr. Gladstone for the first time became Premier with a majority of one hundred and eighteen. I may at a later period have something to say on the achievements of this Government.

As I have already said, I was much overworked and run down, and a few days before I went up to London in May, 1870, to attend a meeting of the Alkali Association, of which I was one of the Honorary Secretaries, I stumbled over some bricks which were lying on the ground in the works and hurt my arm. At the time I did not attach much importance to the slight abrasion of the skin, but as my arm grew more painful and swollen I went to consult my brother-in-law, Dr. Harley, who said it was rather a serious case of erysipelas and I had better come and stay with him, which I accordingly did.

In a few weeks I had recovered sufficiently to return home, but my progress was slow and the erysipelas extended to my throat. With a view to the recovery of my ordinary health I determined to go to the Engadine, and as my wife was not able to accompany me I took her sister, Lizzie Baines, and Annie Higgins, her cousin, as my travelling companions.

We made our way as quickly as possible to Zurich and then to Ragatz or Bad Pfeffers, where, in the hotel, were a number of Germans with their wives and families. The day after our arrival nearly all the men were obliged

to leave, being called for service in the army, and this was the first intimation we had of the probability of a war between France and Germany.

We however proceeded to the Engadine, through the most beautiful country, and as I did not care to stay at St. Moritz, which was just becoming a very fashionable resort, we went to Pontresina, generally frequented by pedestrians and mountaineers on account of the glaciers and high mountains which could be ascended. The hotel was not very large, and the food very indifferent, and as the hotel itself was full, we had to be lodged in houses in the village, but this did not interfere with our enjoyment, and in the magnificent air at an elevation of over 5000 feet above the level of the sea, I quickly recovered my usual health and strength, and for the first time began to really enjoy and understand the enthusiasm roused by mountain climbing.

Our stay here was, however, curtailed by news of the commencement of the war on July 12th, and everyone began to consider how quickly and by what route it were best to return home. We descended, and went to the Hotel Bauer at Zurich. For some time past, during diplomatic discussions, many people, both in Switzerland and elsewhere, had begun to hoard gold. I was, however, rather fortunately placed, because before going to the Engadine I had cashed about forty pounds of my notes, and owing to the shortness of my stay had a large portion unused. When I asked for my bill at the Hotel Bauer I offered to pay as I usually did by a circular note. At first the landlord refused to take it, but as I told him he would have to take that or nothing, he cashed the note and brought the change, partly in silver and partly in gold.

There were two ways of returning home, either through France or Germany ; and as the German troops were all moving towards the Rhine, and the French would naturally come in the same direction, I thought we should meet with less obstruction on the railway if I went to Lausanne and entered France below Lyons. This we accordingly did, but even on the Lyons railway we found many signs of war. Most of the large stations were filled with troops, and there was some delay in arriving at Paris, which we reached about August 5th.

The terminus of the Lyons railway is rather a long distance from the Grand Hôtel on the boulevards. On the Place de la Bastille and near the railway station flags were flying to celebrate what they fondly believed was the victory of the French in the first great battle of the campaign. As we approached the Hôtel de Ville and the Rue de Rivoli there were no flags flying, for the news had already arrived that the victory they had anticipated had been turned into a defeat, but we saw many troops marching along the boulevards to join the army, with loud cries of "à Berlin !"

As was my usual course in Paris, we did not take dinner at the hotel, and wishing to show my companions some of the sights, I took them to the Palais Royal, and returned about half-past eight or nine o'clock along the Rue de Rivoli and then into the Place Vendôme. Here we were met by an extraordinary sight. Emile Olivier, the Prime Minister, who had vainly boasted that everything was ready "even to the last button on the soldiers' coats," had his house in the Place Vendôme, and the mob had assembled to execrate him and the Ministry as the cause of their defeat by Germany.

In vainly endeavouring to get through the crowd with these two young girls I sought refuge in the Hotel Bristol, where they were closing the *porte cochère*, and at first did not wish to allow us to enter, but at last they relented, and we stayed there about two hours, during which time the police were almost powerless, but at last, having received reinforcements, they cleared the square, and we accordingly returned to our hotel under the escort of two gendarmes.

Next morning was very wet, but the scene on the boulevards was an extraordinary one. The small kiosks for the sale of newspapers were besieged, and as everyone was anxious to hear the latest news, little groups were formed, with a man in the centre in possession of a newspaper, reading the contents to the assembled crowd, who were undeterred by the heavy downfall of rain, and yelled and shouted in execration of the Government.

My custom when returning to England from France and passing through Lille was to stay with the Kuhlmann family for at least a night. However, the morning after my arrival in Paris I received a telegram to say they could not receive me. I could not understand this as I had seen nothing in the French papers which could account for the message, but on looking through the *Morning Post* at the hotel I saw that General Colson was among the dead at the battle of Wörth. General Colson had married the fourth daughter of Mr. Kuhlmann, a very beautiful girl, who before her marriage had stayed with us for a considerable time at Seaforth.

I now decided to return straight to England and started by the early train. This train ran through from Paris to Amiens without stopping, occupying at least two hours.

Just before starting a man jumped into the first-class carriage in which I and the two girls were seated, and the door was closed. The man very soon began to pace up and down the carriage, raving and execrating the Government, and particularly the Minister of War, Le Bœuf, who, he said, was a traitor. Like many Frenchmen, he really believed that nothing but treachery could have led to the disaster. My companions became very frightened, but I could do nothing to calm their fears as there was no stop for at least two hours, so I thought the best way to pacify the man was by talking to him, which I did. I sincerely sympathised with him and agreed in his desire for a Republic replacing the Empire, as the war was largely caused by the folly of the minority, and by the Empress, who really believed that in spite of the warnings which had been given, the German armies could be easily overthrown. We carried on this conversation until we arrived at Amiens, when somewhat pacified he left the carriage and we proceeded on our journey.

On our arrival in London we stayed a few days and then returned home, and I was again immersed in business. Having so many new processes in hand, I thought it advisable to engage a well-educated chemist as head of the laboratory at Widnes. It was difficult to find at that time a suitable man in England, and in Germany, owing to the war, which had taken so many young men for service in the army, it was difficult to find a young chemist willing to come to this country. After some correspondence with Professor Knapp, of Brunswick Polytechnic, I engaged a Dr. Jurisch, who had been educated at Berlin.

Later in the year 1870 I was more immediately brought

in contact with some French friends who had been obliged, owing to the advance of the German army and the commencement of the siege, to leave Paris. Monsieur Soubeiran, the son of a well-known chemist, was Curator of the Jardin d'Acclimatation and had married an English lady, who was a great friend of Miss Moon, an aunt of Mrs. Richard Muspratt. Madame Soubeiran was forced to leave Paris with her two children, the elder a daughter of her former marriage, about fourteen years of age, and a little girl of two years old, the daughter of Monsieur Soubeiran. My brother Richard had invited them to come and stay with him in England at Flint, and they came later to visit us at Seaforth. Owing to the close investment of the city by the Germans, Madame Soubeiran was only able to communicate with her husband by balloon post.

Of course, we followed the war with very close attention until the conclusion of peace, when she was able to return to her husband, who had served in the hospitals, as there was little to do at the Jardin d'Acclimatation owing to the consumption of most of the animals as food. Unfortunately very soon after their return the Commune was installed, and Paris was besieged again by the army which had been formed out of the returned prisoners from Germany. Thus instead of returning to a peaceful home, Madame Soubeiran and her children had to witness severe fighting in the street where they lived, suffering greatly from fear of their house being entered by the insurgents. It was not until somewhere about May, 1871, that peace was finally restored.

CHAPTER XII

I HAVE already alluded to my great friend Sam McCulloch, who had been called to the Bar in 1854 or 1855, and after his marriage settled in Liverpool, residing at Waterloo, so that we had many opportunities of meeting. He was a genial companion, very witty and a great acquisition to the Bar mess in Liverpool, and although fairly successful in his profession, he was induced by a Mr. Cleveland to go out to India in 1866, where he very soon obtained marked success, but unfortunately his health suffered from the climate and he was obliged to return home for a long holiday in 1867. Having recovered his health he returned to India and in a short time acquired a considerable fortune. His health having again broken down he returned to England about 1870.

In the spring of 1871 I went to the Continent with my wife, and McCulloch and his wife joined us. As peace had been finally concluded in Paris, after passing a few days in Belgium we went to Strasburg and Metz. This part of France had been annexed by Germany. From Metz we visited Sedan at a time when all the incidents of the war, and its surrender with large numbers of prisoners in the September of the previous year, were fresh in the memory. Most of the cities in the North of France were still occupied by the Germans, and both at Sedan and at Rheims we met a large number of

German officers at the table d'hôte. Paris being now quiet, we proceeded thither, and as the Grand Hotel was still used as a hospital we went to a new small hotel in the neighbourhood, called the Hôtel Splendide, magnificently furnished in the most extravagant way and where we were very comfortable.

But what a contrast was the Paris we now saw with the Paris of only nine months before! Then, we saw many of the French army rushing to the front with cries of "à Berlin!" Now, even the boulevards were almost deserted, and there were hardly any cabs in the streets, for most of the horses had been eaten during the siege. In all the boulevards from the Boulevard du Temple to the Place de la Concorde there was scarcely a window pane in any of the cafés or shops which had not been broken. The Palace of the Tuileries had been burnt, and along the whole extent of the Rue de Rivoli to the Faubourg St. Antoine were the same signs of ruin and devastation.

This visit to the battlefields and Paris was extremely interesting. We naturally called on Madame Soubeiran, and heard vivid descriptions of what they had witnessed, from Monsieur Soubeiran, who had been present during the whole siege by the Germans, and from Madame and her children during the reign of the Commune.

We visited Père la Chaise, where a last stand had been made by the Communists, and bloodstains were still visible on the pavements as it was only ten days after the surrender. For dinner I took my companions to the Véfours Café in the Palais Royal, which I knew very well, and was recognised and welcomed by an old waiter to whom I was accustomed to give my orders verbally and he never made a mistake in serving the dinner: but now,

alas! he had been so dazed and weakened by the occurrences during the siege that he could not execute the orders as they were given, and made the most ludicrous mistakes. One day we visited the Luxemburg Gardens, and as no cabs were to be had there, we returned home on foot, but a great rain storm came on, and even in the more central parts of Paris we could not find any vehicle, and returned to the hotel drenched to the skin.

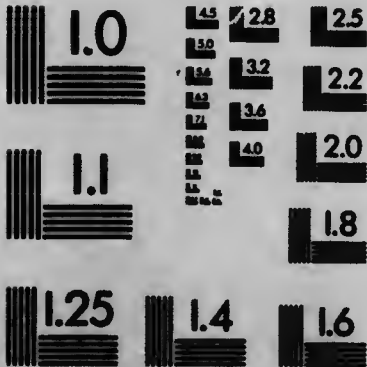
During our tour McCulloch, although not quite himself, was fairly well, and a very lively companion. We visited Heidelberg on our way to Strasburg, and spent a day or two visiting the old haunts of our student days, staying in the Hölländische Hof, where we used generally to dine. On our return to England we left McCulloch and his wife in London in lodgings in Hanover Street. He seemed to keep in fair health to the end of the year, but in 1872 he was taken seriously ill with an abscess on the liver, which was successfully removed, but notwithstanding the services of Sir William Gull, he never rallied, and died that year.

The insurrection of the Commune had been suppressed with great severity and barbarity on the part of the Government, and many of those who had served during its reign escaped to England to find refuge in London. At Mrs. Trautschold's I met a distinguished medical man who was afraid to return to France, and from what he told me I was convinced that there were many intellectual and high-minded men who had joined in the defence of the city against the army from Versailles composed of troops who had been prisoners of war in Germany, and as many of them were suffering severely and some nearly starving, I subscribed to a fund which



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was raised for their support, receiving thanks in the following letter, which I think will be of interest :

SOCIÉTÉ DES REFUGIES DE LA COMMUNE,
LONDRES, le 18 Mai, 1872,

21, VINCENT TERRACE,
ISLINGTON.

CITOYEN,

Permettez-moi de venir, au nom des réfugiés, vous remercier sincèrement, de la somme de dix livres que vous nous avez fait remettre par le citoyen A. Smith.

Entre républicains les compliments sont inutiles, les mots ne sont rien, le souvenir est tout.

Ainsi donc citoyen, *Merci*.

Car la misère est grande et nous avons malheureusement tout bien de croire que notre émigration commence.

Salut, et égalité,
le trésorier,
NAZE.

I had paid my subscription through Monsieur Adolphe Smith, who was connected with the Democratic Association, and this extract from a letter received from him at that time, describing what was occurring even under a Liberal Government, shows a great contrast with what is now tolerated in respect to public meetings in the parks, and processions in the streets.

“ . . . Political matters are becoming more and more complicated in London. Four public-houses have been threatened with the loss of their licenses, for harbouring Democrats.

Other publicans, fearful of the same consequences, have shut their doors against working-men's societies.

The Freedom of Speech Committee is now wandering about in search of a meeting-place. This, together with the Parks Bill, and the objections made to letting any of the large halls for Democratic meetings, looks very like systematic, though indirect, suppression on the part of the powers that be.

The irritation is, therefore, immense, and I should not like to answer for the consequences should the Government afford an occasion for riot, by closing the Parks on the people.

But the thorough democrats are in want of men of ability and of a little better social standing, to say nothing of funds. Should you know of any energetic and devoted young men, gentlemen or workmen, but more especially gentlemen, who wish to render service to the cause, you might address them to me, and I should be most happy to put them in relation with the organisers and organisations where they might render great services."

The next time I saw Adolphe Smith was many years later, when I attended a Free Trade Congress in London, convened by the Cobden Club. There were several meetings addressed by delegates of many foreign countries, the greater portion being delivered in French, which had to be translated as they were delivered, by a gentleman who performed the duty admirably. He translated the speeches in English into French, and those in French into English, very accurately as they proceeded.

After the meeting was over I asked Mr. Fisher Unwin the name of the interpreter. He said it was Adolphe Smith, so I went up to him and asked whether he remembered me. After some hesitation he said, "I think I recognise you, but have forgotten your name." And when I told him he said he remembered the circum-

stances very clearly, and that my subscription had given great satisfaction to the Committee and to all concerned.

I frequently visited London during the next two or three years, and took part in promoting the cause of Financial Reform and Free Trade.

In 1873 a Committee was formed by the House of Commons, to inquire into the question of patents for invention. My practical experience of Patent Law as it affected chemical manufacturers was by no means favourable to the system, as it led to enormous expense in litigation, and paid the lawyers much better than the inventors. I was invited to give evidence before the Committee, which reported that the evils referred to were "inherent in the system itself." The following letter received from my old friend Michael J. Whitty, editor of the *Daily Post*, is, I think, of interest in this connection :—

Saturday, March 24th, 1872.

A blind old man greets his young friend, Mr. E. Muspratt, and begs to congratulate him on his evidence before the Patent Committee.

That evidence was exhaustive, and not less excellent in a literary sense.

Mr. Whitty has no intention of flattering his young friend ; on the contrary, he rather flatters himself, for many years ago, when with Mr. E. Muspratt and dear old friends, looking on the waters of the Atlantic, he saw the promise of that cleverness in his young companion, which this evidence has so amply realised.

6, PRINCE'S PARK TERRACE.

It always seems to be forgotten by those who support the system, that the grant of even a patent is a grant of

a monopoly, which, like other monopolies, should be granted only so far as it serves the interests of the community. It is extremely difficult in the case of a chemical patent to say who is really the true inventor, for it is the working of the process that is of importance, and not the suggestion of the idea, and, in fact, it is only in very exceptional cases that the chemical reaction is novel and unknown. Since the time I gave my evidence the Patent Act has been much improved by the insertion of compulsory clauses, and the insistence upon the working of a foreign patent in this country.

CHAPTER XIII

IN April, 1873, Baron Liebig died.

Justus von Liebig was in many respects one of the greatest men of the nineteenth century. From the time I entered the University of Giessen, when I was only sixteen years of age, I was received by him as one of his family, and treated like a son. I made many journeys with him in Germany, Italy, and England, often sharing the same bedroom, and whenever I could do so, in travelling on the Continent, I went to Munich and generally stayed some days in Liebig's house, and was therefore intimately acquainted with the work upon which he was engaged. He was always a most agreeable companion, and his conversation most entertaining and instructive. In his own house in the evening, at Giessen, Liebig, frequently exhausted by the day's work in the laboratory, sought recreation in reading novels, mostly English—Dickens, Thackeray, or Bulwer Lytton; but he often spoke most genially of his early life in Paris, or of some interesting affairs or investigations which occupied his thoughts, and which appeared later in his celebrated *Letters on Chemistry*. He was a very handsome man, with dark piercing eyes, which at times, when excited by the subject of his conversation or controversy in which he was momentarily engaged, lighted up and became tinged with ferocity.

Having worked already on the explosive powder



BARON VON LIEBIG

From an oil painting by W. Trautschold in possession of E. K. Muspratt



fulminate of silver, called in German "Knall Silber," he read a paper: giving an account of his experiments. At the close of the reading he packed up his specimens, and was leaving the building, when he was accosted by a gentleman who spoke in German, making minute enquiries as to his work at Erlangen. Liebig used to say his questions were worse than any examination for a degree in the University. His unknown questioner being apparently satisfied, then asked him to dine with him on Sunday. Liebig, of course, accepted, but being confused and flurried by the examination, forgot to ask the name of his new friend or where he lived. He therefore hurried back to the Sorbonne and asked the concierge who the gentleman was he had been speaking to, but could not get the information. The next few days he passed in misery, bewailing the loss of the dinner and the further acquaintance of one who seemed to take so much interest in his studies. A few days later a friend said to him: "Why, Liebig, did you not come to dine with Alexander von Humboldt on Sunday? He had invited Thénard, Gay Lussac, and Chevreuil to meet you." At the mention of the name of the most celebrated scientist in Europe, and the great traveller, welcomed everywhere, Liebig, in telling the story, said, "I was horror-struck, put on my cap, and ran at full speed to Humboldt's house, bursting in upon him with most profuse apologies for my non-arrival at the dinner-party on Sunday. After some good-humoured remarks on my stupidity, the great man said, 'Never mind, come next Sunday.' This I did, and there met the celebrated chemist named above; and Gay Lussac asked me to work in his laboratory, where he and I jointly continued the research on the fulminates, one of

the most classical examples of experimental chemical investigation."

As a result of the constitutional changes of 1848-49, trial by jury had been introduced in Hesse-Darmstadt. One of the first cases tried under the new system was a case of murder. Countess Gorlitz had been found dead in her boudoir in Darmstadt. The upper part of the body had been partly burnt under the writing-table, which was also burnt. A Chamberlain of the Countess (Kammerdiener), called Stauff, was suspected and brought to trial before a jury. The defence set up on his behalf was, that it was a case of spontaneous combustion. The Countess was accused of being drunkard, and it was said that her body, saturated with alcohol, was set on fire by the light on her writing-table, which also set fire to the table or desk. In support of this contention a number of cases were cited which had come before the courts and the plea had been admitted.

Liebig was called in as an expert, and he prepared a paper founded on experiments and scientific reasoning. He asserted that none of these cases, when investigated, were of any value, as they had not been witnessed by men familiar with the principles of modern Chemistry, as only since the time of Lavoisier were the necessary conditions of combustion understood. He supported his arguments by experiments made by himself and Bischoff. The human body consisted of seventy-five per cent of water with a boiling point many degrees below the temperature necessary to ignite the most inflammable material. He then showed how he thought the burning had been carried out by Stauff.

I mention this because about the year 1852 a letter was

brought in one evening when I was present, and which Liebig read aloud to us. In this letter Stauff confessed the crime, and said he was surprised at the accuracy with which Liebig had described exactly what he had done. The substance of Liebig's paper appeared in the new edition of the *Letters on Chemistry*, published in 1851, occupying thirty pages, and since then, spontaneous combustion, which up to then had been accepted as probably accountable for many cases of suspected murder, is entirely discredited. Dickens, it will be remembered, describes Crook as dying in this way, and when attacked on this account, cited the old cases, and held firmly to his belief in their truth; but this only shows how incapable the literary man is of judging scientific reasoning based on experiment.

In the course of my narrative I have already referred to the preparation of cold extract of meat which Liebig prepared for my sister, when the fever from which she had been suffering having abated, Dr. Pfeufer, who had attended her during her illness, confessed that, as she could not assimilate any food, she could not possibly recover. This cold extract of meat must not be confused with "Liebig's Extract of Meat," prepared on a large scale at Fray Bentos, near Buenos Ayres, and now become an article of commerce and the forerunner of the various extracts of meat prepared in other countries.

Liebig, in course of conversation, gave me an account of how he was induced to give his name to a commercial company. A gentleman from Hamburg came to him and said he had been very much interested when reading his *Letters on Chemistry* to notice the suggestion that, in addition to bones, tallow, hides, etc., an extract of meat

could be prepared very cheaply in those countries where meat was cheap, but that certain precautions must be taken to avoid the errors of those who had hitherto attempted it.

This Hamburg merchant then asked Liebig to give him more particulars as to the plant that would be required. Liebig replied, "I am not competent to do this, but will give you a letter to Dr. Pettenkofer, the Court Apothecary." When, after several interviews with Dr. Pettenkofer, he returned to Baron Liebig, he was quite satisfied that he could undertake the production of this article at Fray Bentos, but in order to ensure its commercial success, he desired to make use of the great chemist's name, and to form a company called "Liebig's Extract of Meat Company." After some hesitation Liebig consented, on condition that a competent chemist should be appointed to superintend the manufacture, and that a sample should be taken of each shipment and sent to Munich for analysis. This was accordingly done, and, as is well known, many people both in England and on the Continent only know the name of the great chemist in connection with the extract.

It is interesting to note how many industrial processes have been inspired by these *Letters on Chemistry*. From the moment they were first published in the *Augsburger Allgemeine Zeitung*, they became very popular, owing probably to the clear and lucid style, not a common attribute of German prose, in which they were written; and the English translation was also good.

Liebig was often very indignant with certain prominent Englishmen, who, owing to lack of scientific education,

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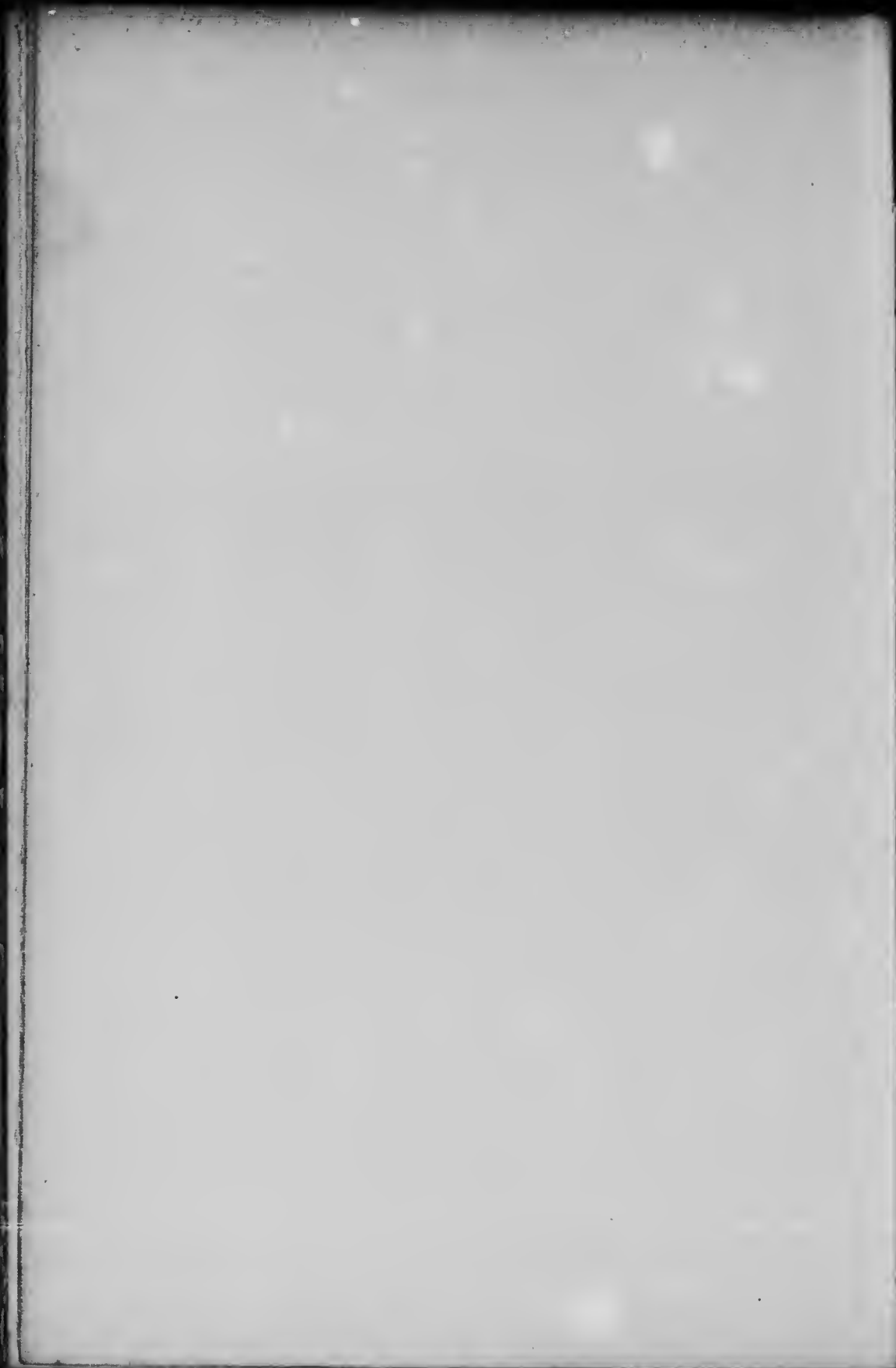
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STATUE OF BARON VON LIEBIG IN GIESSEN



did not understand the application of science to agriculture and industry. As an example, Mr. Pusey, in an address to the Agricultural Society, said that the only advantage agriculture had obtained from science was the suggestion by Liebig of making bones, or phosphate of lime, soluble by the addition of sulphuric acid. On reading this Liebig said to me, "He might as well have praised me for giving a receipt for a new blacking!"

The great industry of artificial manures or fertilisers was first commenced in England and Scotland, but many incompetent manufacturers supplied farmers with rubbish, as they were unable to test the quality, owing to lack of scientific education. In Germany, however, by the inspiration of Liebig, numerous agricultural colleges were founded, and through their influence the quantity of superphosphate per acre of land soon exceeded the quantity used for the same purpose in England. This is now almost universally used in all civilised countries to prevent the exhaustion of the soil and so obtain larger crops.

At the time when the Thames had become so polluted by sewage as to make the House of Commons unpleasant and dangerous to its members, the subject of the sewage disposal of the Metropolis received great attention. Liebig, of course, took a great interest in the question, and wrote several letters to *The Times* newspaper, advocating the disposal of the sewage on agricultural land, instead of pouring it into the river, creating a nuisance; but since then great practical improvements have been made in the treatment of sewage, so as to render its flow into the river innocuous, and a portion of its valuable fertilising properties is now sold as manure.

When I was on the Continent in 1872, and not in very good health, I passed through Munich ; but although I stayed in Liebig's house, Liebig himself was absent at Kissingen, and he pressed me to visit him there, but I was unable to do so because I wished to get up into the mountains as quickly as possible.

I and my family felt the loss of this old friend very deeply. He certainly was one of the greatest men of the last century, and has done more perhaps than any other scientific man for the popularisation of the science of Chemistry and its application to medicine, agriculture, and manufactures, in addition to his pure scientific work ; and the great school of Chemistry which he founded in Giessen raised him to the first rank amongst chemists.

CHAPTER XIV

ALTHOUGH my visit to the Engadine in 1870 had done much to restore my health, still, after my return to work, during the next two or three years I was never entirely well, and as these years were years of great activity in trade, I was obliged to give close application to business. I consulted Mr. Long, a very able medical man in Liverpool, but the drugs he prescribed did apparently very little good and depressed my spirits.

When in London about May, 1873, I stayed with my sister, and had many talks with my brother-in-law, Dr. Harley, a specialist in liver disease. In the course of conversation I suggested I might try Carlsbad. He fell in with the suggestion, and said he would give me a letter to Dr. Seegen, who, in winter, lectured at Vienna University, and practised at Carlsbad in the summer. I therefore decided to try the course, but as it would entail my absence from home for a considerable time, my brother Richard and his wife came to live with my father at Seaforth Hall.

I left home about the second week of June, with my wife, for Carlsbad. We put up at Angers' Hotel, and immediately called on Dr. Seegen, who told me I must take the waters, and follow the cure very strictly. We had to get up at about five o'clock in the morning, to go to one of the wells about six o'clock, without break-

fast, walking up and down for an hour, drinking three cups of the waters during the time. At about seven o'clock we went to a baker's shop and bought rolls, and then walked a mile to a café, where we took coffee. This was served in rather small cups, and was taken either "rechts" or "verkehrt"—that is, with very little milk, or black, or with more milk.

After this it was usual to take a long walk of about two or three hours, except on three days a week, when the walk was shorter, and I took a bath. The dinner hour was twelve, in the hotel where we were, and it was served strictly accordingly to the "Kur"—that is, a little soup, and some roast meat, followed by a compote. After this frugal dinner we took a siesta for two or three hours, then walked to a café and took coffee. This strict régime no doubt was suitable for many of the cases in Carlsbad, where people had come to reduce their weight, but I told Dr. Seegen I could not stand it, and would take a boiled egg with my breakfast, and in the evening eat a beefsteak, which, of course, he did not deny me, so I was all right.

There were two principal cafés in Carlsbad itself, one frequented by Austrians and the other by Hungarians. The bad feeling between the two nationalities was even then so marked that they never mixed socially. Although, of course, there were a certain number of English in Carlsbad, there were none in my hotel, and I had a letter of introduction to the wife of Von Gorup Besanez, Professor of Chemistry at Würzburg, or Erlangen, who came for the cure every year, but without her husband. We became great friends, and as her friends were nearly all Hungarians, we went with her to the café and

became acquainted with an extremely pleasant lady, a Countess, whose name I have forgotten, and a Baroness whose husband did not come till later. The Hungarians spoke German, so I naturally had very pleasant intercourse with them, and they gave me vivid accounts of the abominable way in which they, ladies of good position, were treated by Austrian officers during the period of the Revolution.

At the termination of the cure in four weeks, Dr. Seegen asked me what I intended to do, and I replied, I intended to return home and pursue my business; but he said that if I did so, instead of being cured, my health would be worse than ever. I therefore promised him that, although I did not intend going to the high Alps for an after-cure, I would not return to business, and therefore went with my family to the Lakes of Cumberland. On my return home I went to Flint for a few days, to attend the wedding of my nephew James Liebig Muspratt, eldest son of Richard Muspratt, with Clara Lewis.

In 1874 Gladstone's Ministry resigned, having done more for reform both in England and Ireland than had been possible during the previous twenty years. Disraeli then took office, having secured a large majority at the General Election. His policy, although not quite in accord with that of the Conservatives, was diametrically opposed to that of the Liberals, both Home and Foreign. Mr. Gladstone returned to Hawarden, and although he remained a Member of the House of Commons, Lord Hartington took the position of Leader in that House.

For two years the Government did fairly well, and although Sir Stafford Northcote was Chancellor of the Exchequer and a staunch Free Trader, he soon dissipated

the handsome surplus left by Mr. Gladstone, although he was enabled with that surplus to abolish the sugar duty, but the extravagant administration of the Ministry so increased expenditure, that the surplus disappeared, and we were faced with a deficit. To add to his difficulties, the Government, having learned nothing from the experience of the Crimean War, supported Turkey against Russia, which had taken up the cause of the Christians in the Balkan States. Horrible atrocities were perpetrated by the Turks and reported in the English newspapers, which, when brought before the House of Commons, was spoken of by Disraeli as mere coffee-house babble.

This brought Mr. Gladstone from his retreat at Hawarden, and he published a pamphlet on the Bulgarian atrocities, which produced as great an effect on public opinion as his letter to Lord Aberdeen on the Neapolitan prisons. The country was now immersed in violent agitation on Foreign Policy. Home politics fell into the background. Lord Derby and Lord Carnarvon left the Disraeli Ministry.

After the death of Ellis Eyton, member for Flint, there was a vacancy for the boroughs, and I was asked to become a candidate. As I was strongly in favour of Welsh Disestablishment and Irish Home Rule, I had a good chance of being adopted, but as many Welshmen desired to support Mr. John Roberts, I withdrew in his favour, in order to secure unanimity. I addressed several meetings in his support, and strongly supported Mr. Gladstone in his campaign against the Government's Turkish policy. For two years Mr. Gladstone, who contested Midlothian, delivered a wonderful series of speeches, and secured a majority in that constituency. Although some of the

old Whigs were not inclined to support him, when the General Election occurred in 1880, the Liberals were returned to the House of Commons with a large majority, and, notwithstanding the desire of the Queen to have Lord Hartington or Lord Granville as Prime Minister, she was obliged to accept Mr. Gladstone.

In the summer of 1876 my wife and I took all the children to Hawkstone, a beautiful and extensive park belonging to Lord Hill, where we were allowed to roam at will, and which afforded much amusement to the children. There were large numbers of rabbits and deer, and a so-called Hermit dwelt in a cave, who appeared to amuse the children, when required. This hermit was a waxen image, sitting in a grotto with a skull on the table before him. The guide of the forest would get behind the figure, and being previously primed by Mrs. Muspratt, would tell the children all sorts of surprising information about their home lives, which they of course firmly believed to have been acquired by magic. We stayed at an hotel just at the entrance to the Park, where we were very comfortable. I had taken my carriage and horses, and a pony, so that we could make long excursions in the neighbourhood. I was riding, with my eldest son Lincoln on his little pony, when the pony stumbled and fell, and he was thrown; but not being able to get his feet out of the stirrups, he was kicked by the pony and killed. This sad accident put a stop to all our pleasure, and we returned home. Poor Lincoln was only ten years old, and a beautiful and intelligent boy, who was beloved by all who knew him.

Before we went to Hawkstone I had made arrangements to go to America for the Centennial Exhibition, which took

place that year in Philadelphia, in celebration of the Declaration of Independence. Although I was reluctant to leave my wife and family after the sad loss of our boy, I finally decided to take my passage to New York, and sailed in the White Star boat, *Celtic*, on September 7th, arriving at New York after a somewhat stormy passage, on the 17th. As I did not wish to be absent from home for more than about six weeks, I determined to confine my visit to the Eastern States, leaving a visit to the West for a future occasion.

I have, in speaking of my student days, mentioned the numerous Americans whom I met in Germany, many of whom were occupying professorships at both Harvard and Yale Colleges, and other Universities in the Eastern States, so I had no difficulty in visiting them at their homes. After a few days spent in New York and going to Seabright, near Longbeach, where J. L. Riker, our New York agent, had a house which he occupied in the hot months during the summer, I left New York for New Haven on the 26th. Here I stayed with my old friend George J. Brush, who succeeded Professor Dana as Professor of Mineralogy in Yale University, and made the acquaintance of his wife and family, spending several delightful days talking over old times. His house was situated in the old part of the town, which was beautifully laid out, the streets being lined with elms of considerable size, some being about one hundred and fifty years old, giving to the whole town a very pleasing appearance.

A Mr. Sheffield had left a large sum of money, about two hundred thousand pounds, for a special Scientific School connected with the University; both Brush and Professor S. Johnson, an agricultural chemist, were

especially attached to that institution. While visiting Brush I also met Professor Marsh, who had made great discoveries of fossil remains of birds and horses in the extreme Western States, and had brought them to New Haven. His discoveries were extremely interesting, as they supported the Darwinian theory of the evolution of species. Just about this time Professor Huxley came to New Haven for a few weeks to study these remains, and afterwards delivered three lectures in New York on the evolution theory, much to the dismay of the theologians, who, like their confrères in England, were reluctant to admit any other theory of creation than that recorded in Genesis.

From New Haven I went to Norwich in Connecticut to visit Emma Shipley, a connection of mine who held the position of teacher in a College for secondary education for girls and boys, where she received a good salary. We drove round the town, which is beautifully situated on the sides of hills, forming a kind of amphitheatre. The houses are mostly built of wood painted white, with green Venetian blinds outside, and all detached, with small gardens round them. The whole scene reminded me of many places in Switzerland. We also saw the grave of Uncas, the last of the Mohicans. The story in Cooper's novel is rather different from history, but I fancy the novel will live when the history is forgotten.

From Norwich I went through New London to Newport, and stayed with Ned Cushman, son of my sister-in-law, a sister of Charlotte Cushman, the great actress. Ned Cushman was now married, and had a family of three or four boys. Newport at that time was a fashionable seaside resort, where there were many handsome villas, which, if I

remember rightly, were called " Cottages," and occupied by many rich people, principally from New York or other large towns. I spent a few days there, and then went, accompanied by Cushman, to Boston. Cushman's brother-in-law was a Professor at Harvard College, situated at Cambridge, about three miles from Boston.

We spent the whole of Sunday in Boston, and in the evening heard a lecture by Mrs. Woodhull on Women's Emancipation. She was at that time very advanced in her opinions, and was even then an advocate of the new doctrine of Eugenics, which led her to advocate free love. She spoke for about an hour and a half, but her discourse was very illogical, and I was not sufficiently impressed to care to hear her again.

On October 5th I returned to New York from Boston, and then went on by the night train to Niagara. The appearance of Niagara at first is always disappointing, but I was prepared for this, and waited till I had visited every part of it before forming an opinion. The next morning, although the day was very cold, the sun was shining. I first drove over Goat Island, which separates the two falls, and then walked about and took a boat across the river (the ferry) just below the falls. Here you see Niagara to perfection, and the sight was wonderful. I never witnessed anything more sublime, and indeed the only thing that I have seen to compare with it, is the Rhone Glacier, the river above the falls reminding one very much of a large glacier. The foaming water is not unlike ice in colour, and the enormous force, irresistible force, which is the most enduring impression made on the mind by the grand spectacle, is common to both. From Niagara I went on to Toronto, where I spent Sunday.

I have been assisted in my memoirs of this American tour by letters I wrote to my wife, and the following is an extract :—

“Being Sunday, the dinner-hour was fixed for two o'clock, so after breakfast I examined a map of the town and started off on a walk. I walked quickly to keep warm, as the wind was terribly cold.

The town is very nicely laid out, and there are several fine buildings. My object was the University, and the Park of fifty acres surrounding it. The building is very fine and the Park looked well with the autumn foliage. An avenue a mile long, of chestnut trees, leads up to the college. After walking for an hour and a half I bent my way back through the town, but for a long time I did not see a creature, and not a single carriage or tram-car was in the streets. Presently a few people came out of church, but I never beheld such a silent city. Just fancy, out of 70,000 inhabitants, meeting only about twenty in two hours! Luckily the sun came out and cheered me up a little.

After dinner and a cigar I turned out again to visit another part of the town, but very few more people were in the streets, and I walked for two hours, bringing me to six o'clock, when I was forced to turn in, as it was dark, and I nearly lost my way.

This morning I am quite stiff, as I have not had such a walk since I left. The Americans always ride, and it was quite amusing going about with Ned Cushman in Boston. We walked slowly for about an hour, and when we got back he said he had never had such a walk for years.

This morning I have walked about Toronto again. The main street, King Street, is very handsome, and there are several good shops in it. The people seem to have a very healthy look, but there is not the same bustle and movement as in an American city.”

Much of this is now changed as Canada has become more prosperous, but I am afraid Toronto, although increased in size and activity, is still influenced by Sabbatarianism, as the population is mostly of Scottish descent.

QUEBEC,

October 14th, 1876.

MY DEAREST FRANCES,

My last to you was from Toronto, which town I left last Tuesday in a steamer and came down Lake Ontario and the St. Lawrence to Montreal.

The river is in parts very pretty, and shooting the rapids rather novel. We arrived in Montreal early on Thursday morning, and went off by the 7 a.m. train to Lachine to shoot the Lachine rapids in a steamer which runs from there to the town. By doing this we obtained a fine view of the city and the Victoria Bridge as well, and got back to Montreal at 9 a.m. in time for a good breakfast with an appetite sharpened by the cold piercing air.

Montreal is a fine city, and the drive round the mountain with a view of the St. Lawrence reminds one of the drive round Arthur's Seat at Edinburgh.

Henry Smith had brought his wife to Montreal to stay with some friends, and I returned with him to Quebec, where we are settled in bachelor's quarters.

The river steamer we came in last night is the first I have been on, and is a sight worth seeing. I had an excellent state room and slept as comfortably as in bed. It is certainly travelling made easy. On our arrival here at 7 a.m. we found ourselves in a snowstorm, and since we got into the house have been obliged to remain there, as it has never ceased since morning, and the snow is at least seven inches deep. Fancy that in the middle of October!

NEW YORK,

Oct. 21st, 1876.

My visit to Quebec was spoiled by the weather, but on my journey to New York I had two days of the Indian summer, quite warm and bright in the middle of the day.

I came down Lake Champlain, which is very pretty, in a beautiful steamboat, and on to Saratoga, as I could not visit Lake George, the steamers being taken off for the winter.

I spent three hours in Saratoga, a most uninteresting place out of the season, and came on to Albany the same evening.

Albany is a very handsome town on the banks of the Hudson. From Albany I took the railroad to New York and had a ride along the banks of the Hudson, which looked lovely on account of the brilliant foliage. Cropsey's picture which you saw gives only a faint idea of the beauty of the scene.

The Catskill Mountains are very fine, and in many parts the scenery surpasses the Rhine, but of course one misses the castles and historical associations.

PHILADELPHIA,

Oct. 24th, 1876.

I left New York on Saturday, hoping to have reached Philadelphia about 6 o'clock, but the railroad was so thronged I was more than two hours late and did not turn up till half-past eight. I received a very warm welcome from Horace Furness and his wife, and I am very comfortably lodged with them. They have four children, three boys and one girl, the little girl, Polly, only about three years old.

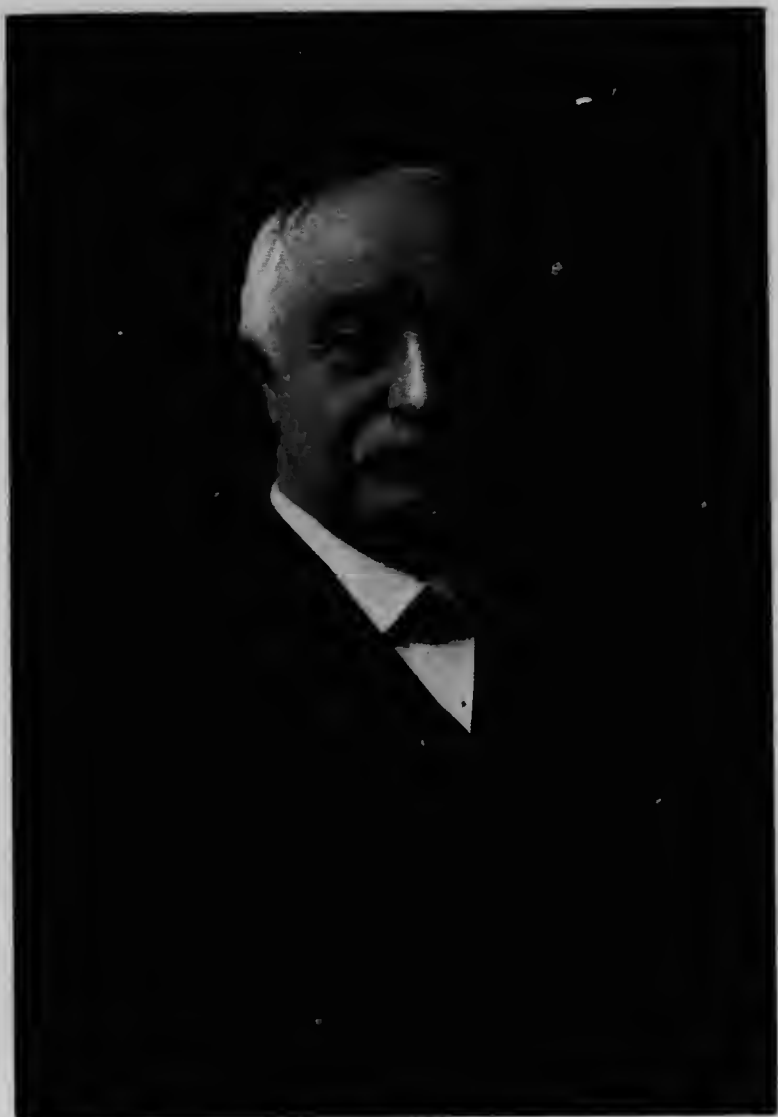
The house is situated in Washington Square in the old part of the town, and below is his office. The upper

rooms very nicely furnished. His study is charming, he has bookcases all round, filled with works of Shakespeare, and on one side a copy of the bust of Shakespeare at Stratford, with the inscription above it, and on the other side a cast of the head of Garrick, and in a case underneath a pair of theatrical gloves which belonged to Shakespeare and were presented to Garrick by the town of Stratford at the Jubilee in 1764. They then came into the hands of Mrs. Siddons, were bequeathed by her to her niece, Mrs. Fanny Kemble, and given by the latter to Furness.

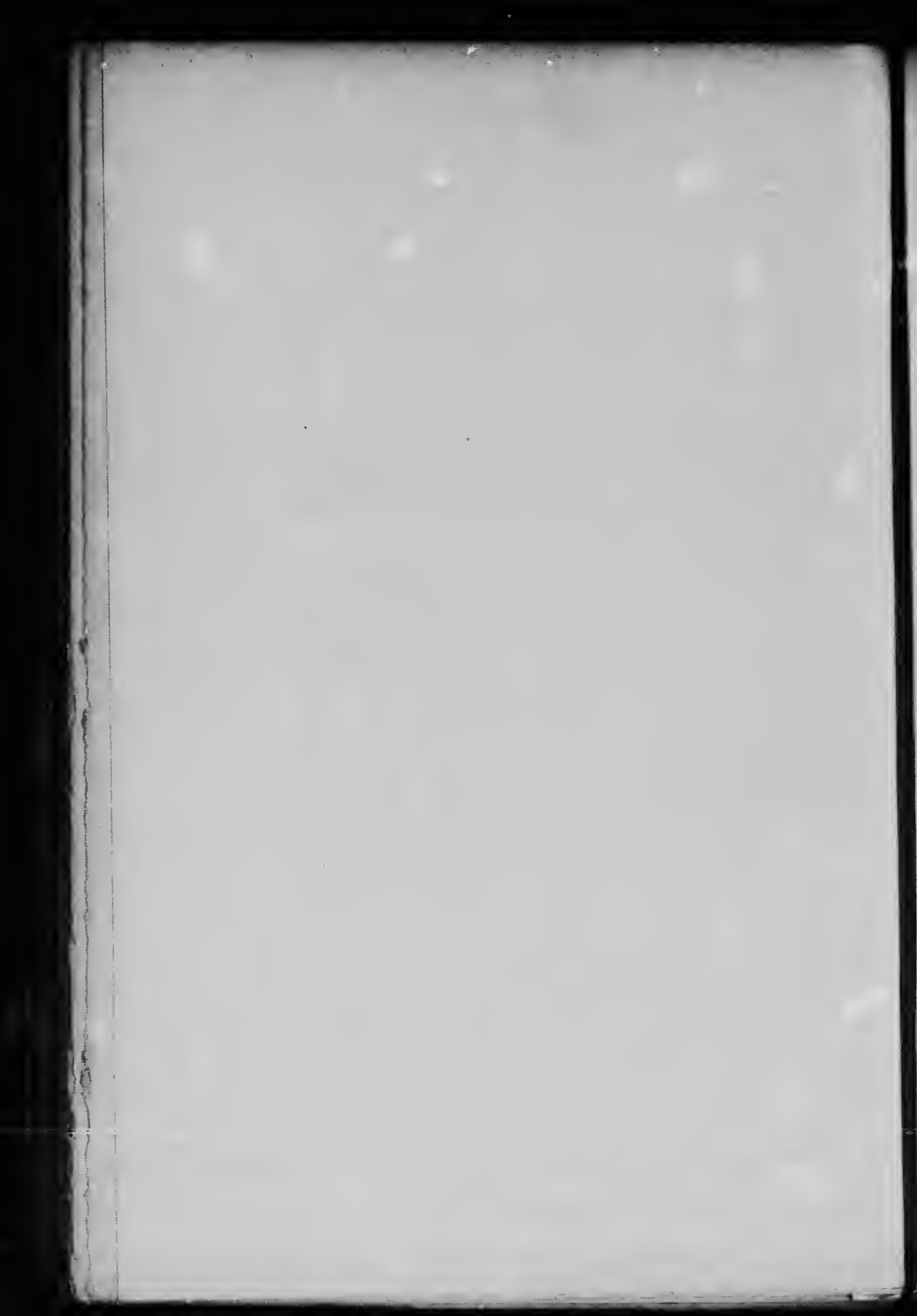
He has also many other curiosities and relics of a similar kind, and all the literature about Shakespeare in every language. He is the same pleasant fellow he was twenty years ago, and although rather deaf, with an ear trumpet he understands all I say, and we talk often till 1 o'clock in the morning.

Mrs. Furness is also very pleasant. On Sunday I went with her to the Unitarian Chapel, where old Mr. Furness used to preach, but he gave it up a year ago. Horace did not go as he says he cannot hear. We had a very nice service, the music very good. Some of Schubert and Mendelssohn instead of the ordinary hymn tunes, and they use Martineau's Hymn Book. The sermon was preached by a man from Boston and was fair. In the evening I went with Horace and his wife to his father's house and was introduced to the rest of the family. His mother is a charming old lady, and old Mr. Furness a very pleasant and intelligent man.

You really must come out here and see them, you would be delighted. They have last year celebrated their golden wedding, and just fancy, although both are about seventy-four they made a trip to Colorado and San Francisco! Mrs. Furness is one of the most charming old ladies I ever met, her voice is very sweet and musical and she has no American twang—the fact is the whole family speak



HORACE HOWARD FURNESS



beautiful English without a trace of American twang about them.

I have been often to see the Exhibition, which is well worth seeing, and taking it as a whole it must be considered in every way successful. If we compare it with the European Exhibitions, in many departments it is deficient, but that is not surprising as the cost and expense of sending articles of European manufacture across the ocean is so great, and the prohibitive American tariff is a bar to any prospect of extending trade in many articles which are manufactured better and cheaper in Europe. But as an Exhibition of American Industry it is marvellous and extremely interesting. From it one gathers some idea of the enormous natural resources of the country and the extraordinary ingenuity and industry of the people.

It is also interesting in bringing into one focus the population of the various States, and the orderly behaviour of the crowds who attended during the last few weeks was most remarkable. Notwithstanding that there were people from the Far West and many unsettled parts of the Union there was no approach to rowdiness or even vulgarity. One and all in that vast throng seemed to respect the rights and convenience of his neighbour.

In a week I shall be on my way back, and although my stay here is very pleasant on account of the kindness of Horace and his wife, I long to be back with you again.

CHAPTER XV

IN the year 1875 I was elected President of the Liverpool Chamber of Commerce, and in 1877 was returned to the Town Council as representative for St. Peter's Ward.

At that time there was a great revival of Liberalism in Liverpool, and the election was conducted with much more spirit than usual, owing to the activity of the new Liberal Association, consisting of nine hundred active politicians elected on the plan introduced by Birmingham and generally called the "Caucus." Up to this time I had not taken any very active part in party politics, having devoted my attention principally to the promotion of Financial Reform and Commercial legislation.

Until Mr. Gladstone came into power there was no prospect of great reforms being carried out, and the question of land tenure and the extension of Home Rule to Ireland, and the Disestablishment of the State Church in Wales received little support from the so-called Liberal party. With Gladstone's advent to power all was changed, and the question of the government of Ireland and the amendment of the land legislation was seriously undertaken.

Parties were now divided on principles. As I have already said, Mr. Disraeli's accession to power in 1874 diverted for a time attention from home politics and led to his appearance with Lord Salisbury at the Berlin

Congress, which really did not settle the Eastern question ; it was again reopened in 1913, by the war in the Balkans, which will, it is to be hoped, ultimately lead to the carrying out of Mr. Gladstone's policy of turning the Turkish Government out of Europe.

In municipal politics in Liverpool when I entered the City Council in 1877 there were many interesting questions, particularly the Vrynwy Water Scheme and the election of a medical officer of health in place of Dr. Trench. But before I speak of these things I must refer to the interesting debate in the City Council when its Parliamentary Committee opposed the granting of a charter to Owen's College to enable them to grant degrees.

At this time the only body, other than Oxford, Cambridge, and Durham, which had the power of the University to grant degrees, was the London University, which granted degrees to all comers, provided they passed an examination only, without reference to their education and training. As Chairman of the Science and Art classes I saw the evils resulting from the South Kensington system, which proceeded on the same lines. From this experience, together with the evils of the system of payment by result in elementary education, I had come to the conclusion that there must be a radical change in our whole system of education. On a division I only had about five supporters. No doubt many were influenced by jealousy of Manchester ; and the Royal Infirmary School of Medicine, which was doing excellent work, was afraid that if Manchester only obtained the power of granting degrees it would be detrimental to their school. This action of the City Council led to much

correspondence and discussion of the subject. It was finally recognised that it would not do for Liverpool to oppose the granting of a charter to the University of Manchester, particularly as Birmingham and other towns supported the movement. To meet the situation a compromise was arrived at by the granting of a charter to a new University called the Victoria University of Manchester, with three colleges—Owen's College, which was fully equipped, Leeds University College, and University College, Liverpool; but these two, before they could be admitted as Constituent Colleges of the new University, had to fulfil certain conditions of equipment and teaching staff, in which they were deficient.

Owing to the exertions of Mr. William Rathbone, Mr. Charles Beard, and Mr. Christopher Bushell a sum of £70,000 was subscribed for the endowment of seven Chairs, and the City Council granted a piece of land on Brownlow Hill, with a building which had previously been a lunatic asylum. University College was then admitted as one of the colleges of Victoria University. This was the beginning of University College, which has now developed into a true self-governing University. I shall refer to this subject at greater length later.

And now for the Vrynwy Water Scheme. For some years it had become evident that Rivington water supply, even when supplemented by water from some of the wells, was insufficient for the requirements of the city of Liverpool. The Water Engineer, C. F. Deacon, had introduced several appliances to prevent the waste of water, which was very great, and this gave him and the Water Committee sufficient time to discover a new source of supply.

After several schemes had been discussed they finally recommended us to go to Vrynwy, where by throwing an embankment across the end of the valley a quantity of water would be impounded to form a lake, right in the centre of Wales, with little fear of contamination of the water by a large population. This scheme roused great opposition, particularly from the Health Committee and Mr. Stopford Taylor, the Medical Officer for Health, on the ground that from the analysis which had been made by Dr. Campbell Brown it contained what, according to Dr. Frankland's method, was an amount of organic carbon in excess of what a Royal Commission considered desirable for potable water.

The Town Clerk consulted me on the subject, as I was a member of the Water Committee and supported the scheme, and I told him I did not consider that chemical analysis alone was sufficient to indicate whether the use of the water would be unhealthy, and that what should be looked to was the gathering ground.

With a view to deciding the question Dr. Frankland was invited to meet some of the members of the Health Committee and of the Water Committee. At this interview I asked Dr. Frankland whether, in his opinion, the small amount of organic carbon found by the analysis of the Vrynwy water would render the water not potable if that carbon was caused by peat and not from sewage contamination. His reply was, "Certainly not." This disposed of the arguments of the Medical Officer of Health and the Health Committee, which would have been fatal to the scheme.

This, however, did not end the controversy. The opponents of the scheme carried on vehement opposition,

headed by Sir Arthur Forwood, the Chairman of the Health Committee, and his brother, Sir W. B. Forwood, who supported another scheme, to obtain water from Haweswater. The Chairman of the Health Committee, supported by the Medical Officer of Health, with a view to the reduction of the expenditure of the new works, wished to reduce the quantity of water which would be required in the future to about twelve or fifteen gallons per head of the population, in place of the thirty gallons per head standard adopted by the Water Committee, by obtaining water from the Dee, which, however, was not free from the risk of pollution; a curious line to be taken up by the Health Committee.

The Vrynwy Scheme having been now adopted by the Council the work proceeded under the direction of Mr. Deacon, the Engineer of the Water Committee, in conjunction with Mr. Hawksley, a very eminent Engineer. The scheme necessitated the construction of a strong embankment or dam at the narrowest part of the valley, which when constructed was a marvellous feat of engineering.

The opposition now took up the cry that the dam was not strong enough and might lead to disastrous results by bursting and flooding the country. The Water Committee insisted that every precaution had been taken in the construction of the dam, but the Council were not satisfied with the opinion of the engineers and insisted on an enquiry being made by an engineer appointed by the Government. This led to further delay and expense, but the report of the Government engineers being favourable, the opposition was finally silenced, and Lake Vrynwy, now the largest lake in Wales, came into

existence. It is beautifully situated, and the watershed having been purchased by the Corporation and planted with trees, any possible sewage pollution in the future is prevented.

I have thought it desirable to give a short description of the difficulties encountered in the carrying out of a great scheme which supplies Liverpool with sufficient water for many years to come, for having been instrumental in bringing it about, it is naturally a satisfaction to see how successfully the enterprise has fulfilled itself.

Early in the spring of 1881, a few alkali manufacturers of Widnes and St. Helens, with Dr. Ludwig Mond, met Dr. Campbell Brown in the rooms of the Royal Infirmary School of Medicine, to discuss what steps could be taken to bring into closer touch professional scientific chemists with manufacturers and technical chemists. It was suggested that the best means would be the formation of a society consisting of purely scientific chemists and those engaged in the application of the science.

We then approached Professor Henry Roscoe, Head of the Laboratory at Owen's College, Manchester. He at once entered very cordially into the scheme and in a short time about three hundred members joined the society, which took the name of "The Society of Chemical Industry." The first general meeting was held in London, three months after the inauguration of the society, on June 28th and 29th, 1881, with Professor Roscoe in the chair, who delivered an admirable address. The Secretary, Mr. George E. Davis, read a report showing that out of the three hundred members there were twenty-three Alkali manufacturers, fifteen Chemical engineers, twenty-

three Professors and Demonstrators, forty-nine Analytical Chemists and Assayers and other chemists connected with various industries. In addition, several continental chemists joined the Society: Professor Hofmann, of Berlin, Professor Lunge, of Zurich, and others.

Professor Roscoe pointed out that among the objects of the society were the promotion of the application of chemical science to industries, and of the interchange of ideas between professional and industrial chemists, thus enabling them to meet the inevitable increase of foreign competition. Annual meetings were to be held in various towns, and local sections were to be formed with monthly meetings during the winter. The publication of a journal was also contemplated, giving not only reports of our meetings, but containing information concerning new processes and patents.

The society now made rapid progress, numerous local sections were formed and extended to the colonies of Australia and Canada, and in the United States a strong section was formed in New York. The members of the society also increased rapidly and soon numbered over four thousand.

At the first meeting, after the President's address, I read a paper on noxious gases legislation which was followed by a discussion, and the amended Act which was then passed through Parliament was based on the principles laid down in the paper. About ten years later, in 1890, the United Alkali Company, Limited, was formed for the purchase of, and consolidating into one undertaking, various chemical and copper works in the United Kingdom in which bleaching powder and other

chlorine products, soda ash, caustic soda, sulphate of soda, crystals of soda, sulphuric acid, sulphur, etc., were manufactured by the so-called Le Blanc process, and two works in which alkali was manufactured by the ammonia soda process. By this amalgamation several small works were closed and the others were placed under competent scientific management, resulting in more economical production.

A central laboratory was built fully equipped for chemical research and a large number of trained chemists were engaged at adequate salaries with a view to improving the processes of manufacture, and where thought advisable, of investigating and adopting new inventions.

CHAPTER XVI

1880-1914

MR. GLADSTONE during the years 1878 and 1879 had carried on a vigorous agitation against the policy of Lord Beaconsfield, which had also led to the secession from his Government of Lord Derby and Lord Carnarvon.

The country had, however, now recovered from the jingo fever, and at the General Election in 1880 returned a large majority of Liberals, who, however, were divided into two sections—the old Whigs and the Radicals. The Opposition, although weakened by the secession of Lord Carnarvon and Lord Derby, and what they considered the lukewarmness of Sir Stafford Northcote, were really led by the so-called Fourth Party, consisting of Lord Randolph Churchill, Drummond Wolff, and Sir John Gorst, assisted by Mr. Balfour, the nephew of Lord Salisbury.

At the General Election Mr. Bradlaugh, the iconoclast and freethinker, had been returned for Northampton, together with Mr. Labouchere. When Mr. Bradlaugh presented himself to take the oath they endeavoured to prevent him taking his seat by refusing to allow him to take the oath or even to affirm, as provided by an Act which permitted affirmation where there was a conscientious objection as to the oath.

This naturally led to a division amongst the Liberals, as some of the Dissenters were opposed to Mr. Bradlaugh on account of his opinions, and after a very great waste of

time it ended by the Government being placed in a minority of three, as many Irish Catholics, together with some of the Dissenters, joined the Tories in the division lobby. The whole controversy was a disgrace to the House of Commons, as in the next Parliament he took the oath, and at a later period the resolution of the House of Commons was rescinded, thus securing religious equality in the Parliament of the country. The conduct of Mr. Gladstone, who was placed in a most difficult position owing to his strong religious convictions, secured the admiration of all who rose above party on a great occasion, and confirmed his hold on all true Liberals, with the exception of a few extreme Dissenters.

Both Mr. Gladstone and Mr. John Bright, who were, perhaps, the most religious amongst the members of Parliament, supported the rights of freedom of opinion against many who themselves having few, if any, religious convictions opposed the claims of Mr. Bradlaugh and the freedom of every constituency in the kingdom to elect whom they pleased notwithstanding his religious opinions.

In Liverpool the Irish question had always taken a prominent part in all elections, and Lord Ramsay, in 1879, who stood as the Liberal candidate, accepted the principle of Home Rule for Ireland. But in 1880 he succeeded to the peerage as Lord Dalhousie on his father's death.

The year 1879 being very wet led to serious depression in agriculture both in England and in Ireland, and it was necessary for the Government to deal with the land question, as the eviction of tenants from their holdings, owing to their inability to pay any rent, had led to serious agrarian disturbances and outrages.

To meet the immediate difficulties the Irish Secretary, Mr. W. E. Forster, brought in a Compensation for Disturbance Bill, which after having passed the House of Commons was rejected by the House of Lords. This rejection strengthened the hands of Mr. Parnell, who, at the head of a large body of Home Rulers, was able by obstruction of all kinds to place difficulties in the way of the Government. In this they were tacitly assisted by the Fourth Party. In Ireland the Land League was formed to support the tenants who refused to pay rent, which in many cases was impossible owing to the agricultural depression.

The Government proceeded with further measures of reform, and brought in a Land Bill setting up courts to decide what was a fair rent, also embodying the principle of compensation for disturbance, rejected by the House of Lords, for security of tenure to the tenant. This measure did not meet with adequate support from the Irish party, and as outrages continued the Government was forced to bring in a Coercion Bill in 1881. Many Liberals were opposed to this policy of coercion, which had been frequently tried without success in the past, and, to use the words of John Bright, "Force was no remedy."

Personally I was strongly against the Coercion Bill, and when a meeting was held in Liverpool, called especially by working men, I would have attended if it had not been too late, as shown by the following correspondence :—

EDWARD JONES TEMPERANCE HOTEL,

175 ISLINGTON,

23rd Feb., 1881.

E. K. MUSPRATT, ESQ.,

Liverpool.

SIR,

I venture to enclose an invitation to a meeting to be held on Saturday.

The meeting has been organised by persons not directly connected with either political party, who suspect Coercion even when it is supported by both sides of the House of Commons.

You have the reputation of being an independent politician who has always placed the cause of freedom above the interests of faction, and we ask you to sustain this reputation by being present at Saturday's meeting, even if you do not care to speak.

I am, Sir,

on behalf of the organisers of the Meeting,

Yours obediently,

A. COMPTON.

To this I replied :—

I am obliged for your invitation to attend the Anti-Coercion Meeting to be held to-morrow.

Personally I am of opinion that the Government has made a mistake in introducing a Bill for the suspension of the Habeas Corpus Act in Ireland at the present time, as such action ought only to be taken in a country that boasts of its freedom, as a last resort and when no other means is likely to attain the end desired of making the law respected.

Such a case cannot be held to be made out until the main cause of the disturbance, viz. bad land laws, have been reformed.

At the same time I do not fear that it will form a precedent for the suspension of freedom of speech in England, and as the Bill has already all but passed the House of Commons, any action now will be fruitless.

I have already stated that Liberalism in Liverpool was much stimulated by the formation of the new Association on democratic lines—the so-called Nine Hundred with Robert D. Holt as President ; and I was appointed one of the two vice-presidents.

About the same time, or soon after, the Reform Club was founded in Dale Street, with Lord Sefton as the first President. Usually a distinguished guest was invited to a dinner of the Club, and so long as members of the aristocracy or leading Whigs were the guests the dinners were largely attended, as a large number of the members of the club belonged to the old Whig party, and the Radicals were possibly in a minority, but generally active politically.

In the year 1883 I was elected Chairman of the club and inaugurated a series of dinners to distinguished Radicals, which, however, were not attended by large numbers, as the Whig section of the club held aloof.

The first guest I invited was Lord Morley, then member for Newcastle and editor of the old *Pall Mall Gazette*. His vigorous Radicalism, added particularly to his splendid advocacy of the Irish cause, was unpalatable to the older Liberals, and the younger members of the club were not sufficiently aware of his great literary and political insight. Mr. Morley, as he then was, was my guest at Seaforth Hall for three days, and I have delightful reminiscences of our long talks on literary and political subjects.

Another gentleman whom I invited as a guest of the club was Mr. R. H. Hutton, the then editor of the *Spectator* and an author of distinction. Although not so radical as Mr. Morley, he was independent in his political views, and even then, I regretted to find, was opposed to the granting of Home Rule to Ireland. I recollect asking him how it came that he, who had taken so prominent a part in support of the revolution on the Continent in 1848 when he was a young man, did not recognise the feeling of nationality of the Irish, similar to the nationalism of Germany and Italy, which inspired the Irish demand for self-government.

Another guest whom I invited to the club was Mr. James Bryce (now Viscount Bryce), but few of the members really recognised in the historian of the *Holy Roman Empire* the great Radical statesman, and I could only find less than twenty of the club to do him honour. The next guest I invited was Lord Carlingford, who, as Mr. Chichester Fortescue, had shown himself to be a good friend of Ireland; but possibly on account of his being a member of the Upper House the dinner was largely attended. I mention these facts as they indicate the steps taken by the club when Mr. Gladstone brought in his Home Rule Bill three years later.

During the period 1880 to 1890 I was very actively engaged in politics. I was Chairman of the Liverpool Reform Club in 1883 to 1884; President of the Liberal Association of Widnes; specially interested in the extension of the Franchise in the counties and in Home Rule for Ireland, as there was a large Irish and Catholic population in the town; and I was also Vice-President of the Nine Hundred in Liverpool,

and a member of the Town Council for St. Peter's Ward.

I naturally followed with great interest the proceedings in Parliament after Mr. Gladstone had been returned to power with a large majority in the House of Commons. In Liverpool and Widnes the question of Home Rule and Land Tenure roused much enthusiasm amongst Liberals, although after 1885, when Mr. Gladstone introduced a Bill granting Home Rule, many of the Whigs joined the Unionist party and formed the Liberal Unionist Association. This naturally weakened the influence of the Nine Hundred, and it was with difficulty that the Reform Club was not actually broken up.

From 1880 to 1885 I presided at many large meetings of the Widnes Liberal Association, giving special attention to the extension of the Franchise in the counties and the tenure of land in England as well as in Ireland. My views on the Land question were well known, for as President of the Financial Reform Association I had advocated the taxation of land values and security of tenure for the tenant.

In 1882 we held a meeting at Widnes, when Mr. Joseph Arch was present and was enthusiastically received. There can be no doubt the discussion of Land Tenure in Ireland and Mr. Gladstone's Bills fixing rents by Land Courts had brought the Tory party, represented by Lord Salisbury and Mr. W. H. Smith, to advocate as an alternative policy peasant proprietorship and the purchase of the land by the State, thus adopting the principles of J. S. Mill, Cobden, and John Bright, which, twenty years before, had roused the most bitter antagonism of the whole Conservative party.

In 1884 the Bill for the extension of the Franchise in the counties and a redistribution of seats was carried, and the Widnes Division of South-West Lancashire obtained the right to return a member.

The rejection in the first instance by the House of Lords of the Franchise Bill and the previous rejection in 1880 of the Government's Compensation for Disturbance Bill, which led to the formation of the Land League and to many agrarian outrages in Ireland, had roused a strong feeling in the country against the House of Lords, which had been warned by Mr. Gladstone to beware of entering on a quarrel.

In Liverpool we formed a small Association with Mr. Holbrook Gaskell as President, (Mr., now) Sir Edward Russell, Mr. Patterson, and myself being members of the Committee. The time, however, was not ripe for dealing with the question of a second chamber to replace the House of Lords, which, in the words of Mr. Morley, "must either be ended or mended."

At the General Election of 1885, owing to some difference of opinion in the Liberal party, there was much difficulty of finding a suitable candidate for the Widnes Division and I was strongly pressed to accept the position, on the ground that I was the only person likely to unite both sections.

Much against my desire I finally consented to stand, and issued the following address:—

*To the Electors of the Widnes Division of
South-West Lancashire.*

DEAR SIR,

The General Council of the Liberal Association has unanimously elected me as the Liberal candidate for the Widnes Division of South-West Lancashire.

I feel therefore that it becomes my duty, notwithstanding weighty private considerations which would lead me to decline, to accept the invitation to contest the seat in the Liberal interest at the coming Election.

My political opinions are, I believe, generally known to you, as I have taken an active part in public affairs in Liverpool and Widnes, and from the unanimity of the vote in the District Councils, I gather that they are generally acceptable to the Liberal Party in the Division. I hope to have the pleasure of addressing meetings in each district, when I shall explain fully my views on those subjects which are likely to come prominently before the next Parliament.

I need hardly say that, although I desire to advance further in some directions, I cordially support the policy indicated in Mr. Gladstone's Address to the Electors of Midlothian, and that I appeal confidently to the Electors of our Division, who owe their enfranchisement mainly to the exertions of the Liberal party and its great leader, for their support on the polling day.

The Land Laws.—As regards the laws relating to land, among other reforms I am in favour of prohibiting the settlement of land upon unborn persons, and of the general power of creating life estates in land, the amendment of the law of landlord and tenant in a manner to promote and further protect improvements, and such measures as may after discussion be found expedient to facilitate the acquirement of land for residence and cultivation.

Education.—If we are to meet successfully the competition of other nations in manufacturing industry our system of education, both primary and secondary, must be improved. As one of the main causes of irregularity of attendance in primary schools is the payment of school fees, I hope to see them abolished; and I am of opinion this can be done without injury, and indeed with benefit in poor districts, to voluntary or denominational schools,

by means of an increased grant from the Consolidated Fund and without interfering with the present management.

Local Government.—The reform of Local Government is now advocated by Lord Salisbury, who tells us he has always been in favour of decentralisation ; but the party which mutilated the Municipal Corporation Acts in 1835 by the introduction of non-elected members, under the name of aldermen, and who have always shown an instinctive dread of popular election, are not to be trusted with the conduct of this great Reform, which can only be successfully carried out by a Liberal Government.

I am glad to notice that Mr. Gladstone says that the first object to be aimed at is to rectify the balance of taxation between real and personal property, and to put an end to the gross injustice of charging upon labour, through the medium of the Consolidated Fund, local burdens which our laws have always wisely treated as incident to property.

To the new County Councils I would grant full powers of control over Licenses for the sale of alcoholic liquors, but should the measure proposed not include such powers, I shall be prepared to give my support to any well-devised scheme of Local Option.

Ireland.—With respect to Ireland, which must necessarily engage the attention of the coming Parliament, I have always sympathised with the aspirations of her people towards Home Rule, and have consistently deprecated a policy of coercion.

I agree with Mr. John Morley, that a separation would be a disaster to Ireland and a disgrace to England, but I firmly believe in order to bring about a true union of the Kingdoms, which exists now only in name, we should grant to Ireland as much self-government as is consistent with the integrity of the Empire.

As a Past President of the Liverpool Chamber of Com-

merce and Chairman of the Widnes Traders and other Commercial Associations, I trust that if returned to Parliament by your suffrages I shall be able to be of some service to the Industrial and Commercial interests of the community which I shall have the honour to represent.

I am, dear Sir,

Your faithful servant,

EDMUND K. MUSPRATT.

During the year 1885 Lord Salisbury, inspired by Lord Randolph Churchill and the Fourth Party, coquetted with Mr. Parnell and the Irish Nationalists, who were foolish enough to believe they could get better terms from the Tories than from Mr. Gladstone and the Liberal Government, who were not able to promise an absolute suspension of coercion in Ireland. Mr. Gladstone hoped that with the extension of the franchise in the counties he would have been able at the General Election to render himself independent of the support of the Irish party in the House of Commons, leaving his Government a sufficient majority to carry out such Liberal measures dealing with the local government of Ireland which might settle the Irish question. In this he was disappointed, as Mr. Parnell and the Irish Nationalist party, relying upon the professions of the Tories, had decided at the General Election, in all English constituencies, to call upon his followers to support the Tory candidate, as opposed to the Liberal. This policy, naturally, had a disastrous effect in the Widnes Division, for although I had been a strong Home Ruler, and would have voted with the Irish party on this question, orders were given to all the Irish

electors to vote for the Tory candidate. I may here mention a characteristic speech made by my old friend Mr. T. P. O'Connor on this occasion. Coming up to me later, "Tay Pay" pressed my hand and said with empressement, referring to his fellow Irishmen and their orders from Headquarters: "We have got to vote against you, Mr. Muspratt, but it breaks our hear-r-r-ts to do it." Personally I think this was a mistake on the part of Parnell, and I think the Irish party have since seen that had they supported Mr. Gladstone at that election Home Rule would have been carried by a large majority in the English House of Commons, and a fight in the House of Lords would have taken place much earlier, and the Radical party in England would have been strengthened.

But Mr. Gladstone had other difficulties to contend with, as Mr. Chamberlain started his unauthorised programme, which he propounded at Warrington, and caused some difficulties in the Liberal party at Widnes, where I was of course defeated. Ever since Widnes has returned a Tory member, although Widnes itself, if separated from Garston, Woolton, and Huyton, is Liberal.

In 1886 Mr. Gladstone introduced his Home Rule Bill, providing for a separate legislation in Ireland with the exclusion of Irish members. The long discussion amongst various sections of the Liberal party, and the intrigues of Mr. Chamberlain against Mr. Gladstone, and above all the serious defection of Mr. Bright, led to the rejection of this Bill by a majority of thirty in the House of Commons, ninety-three Liberals voting against the Bill.

The result was another General Election in 1886, and I as President of the Widnes Liberal Association induced

Mr. Augustine Birrell to stand as Liberal candidate for the division. On this occasion many of the Whigs and moderate Liberals who had supported me had joined the newly formed Liberal Unionist Association and voted with the Tories. Mr. Birrell was an excellent candidate, and had Widnes returned him at that time it would have been represented in the House of Commons by a member who has filled the highest offices in the State, and carried many notable measures, particularly the creation of an Irish University in Dublin.

As a result of the General Election Mr. Gladstone resigned office, and Lord Salisbury formed a Ministry with Lord Randolph Churchill as Chancellor of the Exchequer, who pressed hard for economy in expenditure, especially in the Army and Navy estimates, but being unable to carry his colleagues with him he resigned his office, which, however, was filled by the appointment of Mr. Goschen, who contested the Liverpool Exchange Division and was defeated by Mr. Neville. The contest was a memorable one, as the head of the Tory party in Liverpool, Sir A. B. Forwood, had led Mr. Goschen to expect a large majority. It was now clear that gradually the so-called Liberal Unionists would be obliged to amalgamate with the ordinary Conservatives.

The Liberal party was now divided, and the majority were for the next few years known as Gladstonian Liberals. They carried on a vigorous campaign in favour of Home Rule in addition to other items of the Liberal programme, including especially Land Reform and the abolition of the so-called Breakfast-table duties.

The Tory Government, who really had got into power by repudiating coercion in Ireland, were forced to bring

in a more drastic Coercion Bill than that proposed by the late Government, and Lord Salisbury's twenty years of resolute government was thus begun, which he said would settle the question of Home Rule. His nephew, Mr. Arthur Balfour, was made Chief Secretary, and agrarian outrages and the non-payment of rents, accompanied by evictions, continued. Not content with indicting those who had committed the outrages, he proceeded to put all his political opponents in prison, by verdicts from packed juries. Among these was Mr. Wilfred Blunt, an English landowner and Conservative, but a strong supporter of Nationalism, a cause which he supported also in Egypt. He was brutally treated in prison and has written a vivid account of his experiences.

The ferocity of Mr. Balfour's government in Ireland, culminating in the Mitchelstown murders, strengthened the Liberals in England, and the cause advanced so much during the next six years that at the General Election of 1890-92 they were returned to power.

Among the causes of the growth of Liberal opinion was the disgraceful action of the Unionist party, who in a series of articles in *The Times* accused Mr. Parnell and the leaders of the Irish Home Rulers with the support of and complicity in ordinary crime. Unable to answer arguments in favour of self-government they simply vilified their political opponents, and just on the eve of the decision of the Crimes Act, in 1887, which perpetually placed Ireland under Military Law, and against all the traditions in favour of liberty among both parties in England, published a letter purported to have been written by Mr. Parnell after the assassination of Lord Frederick Cavendish and Mr. Burke, which was after-

wards proved to be a forgery. After much discussion carried on in 1888 as to how these charges could be met, the Government proposed, against all precedent, to appoint a special commission, presided over by three judges, to enquire into this question of crime and complicity in outrages, with the Attorney-General, Sir R. Webster, afterwards Lord Alverstone, as prosecutor.

Mr. Parnell and his colleagues were all acquitted on the serious charges, and the letter which had been published was proved to have been forged by Mr. Piggott, and the report of the Commission was laid on the table of the House of Commons, February 13th, 1890.

But the publication of the letter in *The Times* was sufficient at the time to pass the drastic Coercion Act, under which Mr. Balfour ruled Ireland. He, however, produced a Bill for the purchase of the land from the landowners, leading to the creation of peasant proprietorship, but it was not compulsory, and the financial proposals were inadequate. However, instead of proceeding with this Bill he dropped it and introduced a Licensing Bill, providing for the reduction of public-houses by paying compensation. Goschen proposed an increase of the spirit duties, and Healy tacked to the Bill a clause that the surplus should be appropriated by some Bill to be passed in the present session. The Government majority having been reduced to four, they decided to suspend the allocation to a future session. The Speaker, however, ruling that the whole proposals were irregular and a departure from Constitutional practice, it was left undecided, and the Government being at its wits' end, Gladstone proposed that the Bill should be referred to a select committee, but the Government

decided to adjourn and call Parliament together in November.

In November, 1890, Parliament met, and the first question discussed was the divorce of Mrs. O'Shea, which resulted in the break up of the Irish party, followed by the death of Parnell on October 6th, 1891. In 1893 the second Home Rule Bill was introduced by the Liberal Government and carried on the second reading in the House of Commons by a majority of forty-three, and on the third reading by a majority of thirty-four, and thrown out by the House of Lords. The House of Lords also in 1894 so mutilated the Employers' Liability Bill and Parish Councils Bill that they had to be dropped. Mr. Gladstone resigned from Parliament in March, 1894, and made his last speech in the House of Commons—containing a vigorous assault upon the House of Lords.

On March 12th, 1894, Parliament met with Lord Rosebery as Prime Minister and Sir William Harcourt as Chancellor of the Exchequer and leader of the House of Commons, who carried his Budget which reformed and revised the so-called "Death Duties," arousing enmity amongst the Tory magnates and the land-owning classes. In June, 1895, in a division on the stock of cordite the Government were defeated by a majority of seven, which led to an appeal to the electors.

Although Sir William Harcourt's Budget was generally popular, his action in supporting local option was unpopular amongst many of the working classes and as a result he was defeated at Derby. The General Election resulted in a great majority for the Tory party owing to the divided state of the Liberals.

For the second time the Tories had a free hand in legislation, as they could always command the support of the House of Lords in whatever they proposed, and although the yield of the death duties added considerably to the income of the State, they speedily squandered the surplus left them by the Liberals in unproductive expenditure on the Army and Navy.

Mr. Chamberlain, who had been appointed Minister for the Colonies, promised to administer them in a very different spirit from that which had prevailed, and was willing to spend money in promoting trade and industry. Had he confined himself to this he might have made a great name as an administrator, but his intervention in South African affairs, in which he was supported by Lord Milner, who had been sent out to Cape Town as Lord High Commissioner, speedily brought about the Boer War and the disorganisation of the finances of the country.

In 1900, as the war was still in progress, the administration thought they had a good chance of winning at a General Election, and dissolved Parliament, and it was vain to oppose them, although a large number of Liberals and Radicals were entirely against the prolongation of the war.

Again the Tories now had nearly six years in which to legislate for the benefit of the country, but little was done except the passing of an Education Bill and the Licensing Bill, both of which were really unpopular, and after the exposure by a Committee of maladministration and corruption in making contracts for war supplies, they carried on the government for a few years more until very nearly the end of the ordinary term of office, and in 1905 Parliament was dissolved.

From 1888 up to 1905, at a time when the Liberal party was much disorganised, owing to the separation from the party of a large number of prominent Liberals on account of the Home Rule Bill introduced by Mr. Gladstone, I, as President of the Financial Reform Association, was actively engaged in agitating the principles of the Association for Financial Reform, including specially the taxation of land. Sir William Harcourt's Budget of 1894 was entirely in accordance with the principle of the Association, as it included a revision and reform of the death duties on a graduated scale, which would furnish sufficient revenue to enable the Government to bring about what was called a "Free Breakfast Table."

In 1888, during the election of the President of the United States, Mr. Henry George took a prominent part in advocating the principles of Free Trade, and on 30th November the Council of the Association invited him to address a meeting under their auspices in the Picton Lecture Hall. His earlier speeches had advocated the taxation of land values, but as he now advocated the policy of Free Trade, which included the substitution of direct for indirect taxation, the objects of our Association approached those of the land taxers in the United States.

From the very formation of the Financial Reform Association the taxation of land by a re-enactment of the old land tax was supported by a large number of the original members of the Association. We therefore endeavoured to get the support of the Liberal party to the principle of the taxation of land values.

In 1889 Mr. Henry George again visited Great Britain and addressed a meeting under our auspices in the Free Trade Hall, Manchester, on 21st May, and in July he and

Mr. W. Lloyd Garrison, son of the great slave abolitionist, addressed a meeting of the Association in the Picton Hall, Liverpool.

In 1893 the Liberal Government appointed a Royal Commission to enquire into the agricultural depression, and if possible suggest a remedy. This Commission, of which the Rt. Hon. Geo. Shaw-Lefevre was Chairman, sat for a long time collecting valuable evidence, but it had not completed its labours when at the election of 1895 the Conservatives came into power and entirely upset the proceedings by the substitution of a report by Mr. Little, containing a scheme for reducing the assessment on land by three-fourths. At the same time Mr. Chaplin introduced a Bill for dealing with agricultural rates. The Bill was introduced on February 11th, six days before the majority or minority reports could be in the hands of any of the other members of the Government, which shows conclusively that the proposals of the Government were first decided upon and then the report of the Commission made to suit these proposals. The whole proceedings in regard to the Agricultural Rating Act were thoroughly discreditable.

The minority report when published embodied and elaborated all the points which had been put forward by the President of the Financial Reform Association in letters to the newspapers, which had been widely circulated. The Association therefore invited Mr. Shaw-Lefevre to a large meeting in the Picton Hall in Liverpool, and resolutions were passed condemning the report of the Royal Commission as being thoroughly bad. This meeting was followed up by others in various parts of the country.

When the Government proposals were embodied in the Agricultural Rating Bill it was felt that they demanded all the opposition we could offer, since they directly traversed what we considered to be the true principles of taxation. In 1889, at a meeting of the Liberal Federation held at Manchester, the taxation of land values was formally adopted by the Federation, and from that time became a plank in the platform of the Liberal party.

During this period the doctrines of Socialism made great progress amongst the working men, and an Independent Labour Party was formed by means of which, through three-cornered contests, many Liberals were defeated at the polls. The objects of the Socialists coincided with some of the principles of Radicalism, which recognised the inequality of wealth intensified by the increase of manufactures, and the Financial Reform Association showed that much of this evil could be remedied by breaking up the monopoly of land by the taxation of land values and by this means the revolutionary proposals of the Socialists could be averted.

I have alluded at some length to this portion of my political action during these years, as it did much to strengthen Liberal and Radical action in the country, which, after nearly twenty years of Tory government, returned the largest Liberal majority in 1905 under the leadership of Sir Henry Campbell-Bannerman.

CHAPTER XVII

DURING the years of the Boer War I had many letters from my daughter Julia, who had married a civil engineer, Hubert Legay Solly, belonging to the well-known Hampshire family of that name. He was educated as a civil engineer, but on account of his health went to South Africa, where he obtained an appointment on the government railways.

My daughter was educated at the Ladies' College, Cheltenham, and with her sister Nessie was among the first women students at University College, Liverpool. Julia there studied botany under Professor Harvey Gibson, and became extremely interested in the flora of South Africa, where many new species have been found, one being named after her by Professor Harvey Gibson. Having spent all her married life in South Africa, my daughter was keenly interested in the political life of the country, and in these letters she dealt with the political situation in South Africa, and thus from the very beginning I became acquainted with the doings of Mr. Rhodes, Mr. (now Lord) Milner, and Mr. Chamberlain, and also of the opposition even in the colony amongs many of the English to their policy. Mr. Milner, from the very first, apparently misled Mr. Chamberlain and the Home Government as to the fighting power of the Boers.

General Sir William Butler, who acted as British

Commissioner during Milner's absence in England, and who had great experience as a General in both Canada and Egypt, knew, and advised the Government that if war occurred the 30,000 Boers, although they were mere armed peasants and volunteers, would be very formidable opponents to any army we might be able to send out from England.

The War Office at home would not listen to his warnings and ordered him to guard a frontier of over 1000 miles with the soldiers then present in South Africa—absurd from a military point of view ; and when war did actually break out they, the Boers, succeeded in defeating the English in several engagements, and to our cost the English Government had to regret that they had not listened to General Butler, who had declared long before that at least 100,000 troops would be necessary to succeed against the forces of the Boer Government.

My daughter's letters are full of details as to the horrible scenes that occurred, and the ferocity and cruelty displayed by both sides, until at last Lord Roberts reached Pretoria.

The ferocities, however, were not confined to the armies in the field, but as martial law was proclaimed over the whole country, including Cape Colony, the most respectable people, both Dutch and English, were subjected to much injury and insults. Private correspondence was subject to the censorship, and all English newspapers which gave a true account of the occurrences during the war, and which opposed the Government policy, were suppressed.

As an example of what went on I quote the following extract from a letter from my daughter :—

November 6th, 1901.

Is it not a shocking thing to doubt whether any letter written in British territory will reach the person addressed? So far as I know, none of my letters have been held back, but the fitfulness of martial law is as marked as its other objectionable qualities, and spying is a mania that grows by what it feeds on.

When one begins to write one hardly knows what to write first, so many and so outrageous are the brutalities we are now suffering from. For over a month we have seen no English papers, they were to have been held back for three weeks, but were "inadvertently" destroyed. *Punch* we were graciously permitted to have last week; also the *Hospital* and the *Weekly Post*. *Truth* is suppressed all through the Colony, including Cape Town, but the *Westminster Budget* (which I also take) I may not have here, but can buy in town, and the *Review of Reviews*, which is suppressed in town, we can read at the Public Library. I went there for the purpose! I was in town one day last week, and went up to the railway bookstall to ask for the *Speaker*; it was sold out. Then I asked for *Truth*, *New Age*, *Review of Reviews*, and the *Referee*—all "suppressed"—a fact of which I was already aware.

A stout, middle-aged man came up just at that moment and asked for the *Sydney Bulletin*. "That is suppressed too," said the clerk. "Damn," said the man. I felt inclined to turn round and say, "Thank you for expressing my sentiments so admirably."

I saw no friends able to give me news of interest when in town, but have indirectly heard that Mrs. Koopmans—an elderly lady living with an elderly sister—has been under arrest in her own house, and subjected to every insult a malice can devise, from the hour martial law was proclaimed. Both ladies are over seventy; they are delicate,

and suffer from "nerves." They are wealthy, and have been one of the great centres of all that is best in Cape society for nearly half a century, so was their father before them; he held some official position. They have a beautiful old house, full of exquisite things, collected during many generations by cultured people. They are intensely Afrikaner in their feelings, and have in no way concealed the fact. Mrs. Koopmans has been the centre of all the good work done for prisoners of war and the women and children prisoners. She has also for many years been the centre point of the Bond party, her house having been open to every Member of Parliament of that body, and many others; in fact people were only too eager to be invited, and every Governor (until Milner) recognised her as a power, and behaved accordingly. All the generals, attachés, scientific lights, etc., thought it an honour to be *allowed* to call there, and when younger she entertained a great deal.

Her house was ransacked, including her private desks, and wardrobes, by a party of "detectives" (that is the word used to me; you see the military dare not do these things themselves).

The old lady stood at the drawing-room door as the party came down, somewhat crestfallen, having found nothing. "Well, don't you feel rather ashamed of yourselves? I hope you will have a cup of tea"—and she waved her hands to the lovely dining-room, where she had had tea set out! Whether the men accepted the offer my informant does not know!

I only hope they won't succeed in killing the old ladies; but shut up in town, with the summer coming, there is every probability of it. Then, of course, no one may see them, and there used to be a constant flow of visitors there, old and new friends, and the doctor, and parson, frequently. I think Mrs. Koopman's spirit will keep her up, but I feel very doubtful about Miss de Wet, who is

more easily crushed, and if she died one wonders if the old lady could hold out alone, surrounded by spies, cut off from letters, and all social intercourse.

I hear that Miss Hobhouse was forcibly prevented from landing about a week ago (held back by four sailors, I am told), and that the military propose to send her back as a prisoner on a troopship. The latter is rumour only. A friend went to the Permit Office to get a pass to visit her, and was refused in a most insulting manner—such are the means employed by a jingo government to gratify the loyalists, who are making the welkin ring with their cries that loyalty does not pay unless every personal and political opponent is delivered bound into their hands for insult and injury.

Make any use you like and can, of this letter—if it reaches you. I ought to have told you something of the farm and our life here, but that will do any time. We like being here immensely, and the country is lovely, so is the house, and garden; indeed every morning when I go out on the stoep and look over False Bay to Table Mountain and the Cape of Good Hope, I remember the lines—"Where every prospect pleases and only man is vile!"

Your loving daughter,

JULIA F. SOLLY.

When peace was proclaimed at Vereeniging there was still great dissatisfaction amongst a section of the Afrianders, who thought that it could not possibly last, as feeling amongst large numbers, owing to deplorable incidents during the war, filled them with hatred of the English.

So long as Lord Milner remained there was really no possibility of a peaceful settlement, and when Mr. Chamberlain visited the colonies, he, notwithstanding a present of a large diamond necklace to his wife, saw that there

was no feeling in his favour, and he apparently recognised that his whole policy had led to a war which he did not expect, and many of his speeches, he confessed, were only bluff. There can be no doubt that he felt deeply this disappointment, and sought the earliest opportunity of separating himself from his colleagues, in order to advocate the policy of Tariff Reform, and to cover his failure as a Colonial Minister.

From this date I gradually retired from active work in general politics, but on Mr. Chamberlain's secession from the Government in 1903, having started a campaign in favour of Tariff Reform, the Financial Reform Association became very active in the cause of Free Trade, and in the F.R.A. almanacs Mr. Chamberlain's statistics in favour of his propaganda, and the absurd doctrines of preference, were thoroughly exposed.

Of course other new bodies, such as the Free Trade Union, did excellent work, in providing meetings and leaflets throughout the country, but, as a matter of principle, the controversy resolved itself into the rival principles of direct and indirect taxation, the main object of the Financial Reform Association.

Mr. Balfour's Government had been much weakened by the divisions in the party caused by the action of Mr. Chamberlain, who had obtained the ascendancy in the country of the Conservative Organisations, and who adopted the principle of so-called Tariff Reform. On November 1st, 1905, Lord Londonderry, in a speech at Sunderland, tried to throw cold water on Chamberlain's propaganda, pointing out that his prophecies had not been fulfilled, and urging Unionists to place Unionism first, other things afterwards.

Mr. Chamberlain then attacked Lord Londonderry at Birmingham, and Mr. Balfour on November 11th, at Seaham Harbour, paid high personal tribute to Lord Londonderry. On November 14th, at Newcastle, the Conference of The National Union of Conservative and Constitutional Associations passed resolutions in favour of Chamberlain's policy. Mr. Balfour then attempted to unite both sections of the party, but without success, and on December 4th, 1905, he resigned. Next day Sir Henry Campbell-Bannerman accepted office and proceeded to form a Cabinet.

For some time the Financial Reform Association had been in communication with him, and he promised to attend the annual meeting of the Association in Liverpool. This meeting was finally fixed for January 9th, 1906, after Sir H. Campbell-Bannerman had become Premier, and was the first large meeting he addressed, with the exception of one in the Albert Hall, London. His speech showed that he, the leader of the Liberal party, was a supporter of the principles of the Financial Reform Association, which, in addition to the support of the freedom of trade, also included the taxation of unearned increment, of land values, and of the differential treatment of income earned and unearned.

In the following year, 1907, the Association invited Mr. Winston Churchill to address a large meeting in the Sun Hall, when he delivered a speech which Lord Eversley, in a letter addressed to me, described as "one of the best defences of Free Trade and exposures of Tariff Reform which I have read."

Another large meeting was held in June of the same year, addressed by Mr. T. Gibson Bowles, at Leeds, and

one meeting was also held in Liverpool at the Sun Hall, when Mr. Ure, the Lord Advocate of Scotland, made a most telling and unanswerable speech on the taxation of land values.

The campaign in favour of Free Trade since 1903 had been so successful that Tariff Reform fell into the background and public opinion became absorbed in the great question of the veto of the House of Lords, which had thrown out the Budget of Mr. Lloyd George, which followed in its main lines the principles of the Association, introducing for the first time in a tentative form taxation of land values, i.e. taxation of unearned increment of the value of land.

In 1908 Mr. Asquith succeeded, on the death of Sir H. Campbell-Bannerman, to the Premiership, and Mr. Lloyd George became Chancellor of the Exchequer.

Then followed the two elections in 1910, and the supremacy of the House of Commons having been secured by the Parliament Act, the public interest in the work of financial reform was lessened. The time of Mr. Asquith's Ministry was occupied in passing the Home Rule and Welsh Disestablishment Bills.

The outbreak of war in August, 1914, stopped, at any rate for a time, any reduction of expenditure and taxation, and in the autumn the Association had to be dissolved.

The work it has done during its sixty years of existence has been fruitful in many reforms in taxation and land tenure ; and it has greatly contributed to those principles of Free Trade and direct taxation which have been of so much benefit to the trade and commerce, and welfare of the country. The new taxation required to meet the expenses of the war has been raised mainly by a greatly

increased income tax on those classes which are best able to bear it.

All along its influence has been directed towards securing efficiency and economy in the public departments; and it is satisfactory to feel that in the year of its dissolution there is a Government in office which, during the greatest war the world has ever seen, is conducting the affairs of the British nation with ability and efficiency alike in civil and military affairs.

CHAPTER XVIII

TOURS ON THE CONTINENT, 1880-90

DURING the years 1880 to 1890 I made several visits to the Continent, in company with my daughters and Mrs. Muspratt.

I frequently, when travelling during the holiday season, arranged to meet my German friends, Professor Karl Thiersch and his family. In 1880 they were staying in Tegernsee in the Bavaria Highlands, and I joined them with my two elder daughters, Julia and Nessie, the latter now Mrs. Egerton Stewart Brown, who was educated at the Ladies' College, Heltham, and University College, Liverpool. She has taken an active part in political life, being a member since 1892 of the Women's Liberal Federation Executive Committee, Chairman of the Liverpool Women's Suffrage Society, an active worker in aid of numerous philanthropic and humanitarian movements, and speaker on political and social questions.

My niece, Ethel Harley, now Mrs. Alec Tweedie, the well-known writer, was one of the party. She also accompanied me on another excursion to the less frequented Eastern Alps, seldom visited by English ladies. It was after this trip that Mrs. Alec Tweedie wrote as a preface to the copy she sent me of one of her books: "It was my uncle E. K. Muspratt who took me my first long travel-expedition as a girl, across the mountains

south of Munich and almost to the Adriatic! The love awakened then for foreign lands continues, and hence I wrote *Porfirio Diaz*."

The conversation on one occasion turned on the Oberammergau Miracle Play, which was being performed that year. With the opening of the railway from Munich, arrangements had been made by Messrs. Cook to secure accommodation, and a large number of tickets had been disposed of in England, but I had not secured my tickets beforehand; and as it was stated all accommodation in the village was full, I had given up all idea of going there. Professor Thiersch told me that a man of the name of Pflunger, who had taken the part of Christ in 1870, or 1871, was under some obligation to his, Professor Thiersch's, father, who had brought him as a young man to Munich to receive instruction in art, which he had put to good account as a wood-carver, and he would give me a letter to Pflunger, who would, if it were at all possible, find accommodation for us in the village. As my daughters were very anxious to see the play, I hired a carriage to drive to Oberammergau through a beautiful country, passing through Walchensee and Partenkirchen.

Justus Thiersch accompanied us, and we drove at once to present our letter of introduction to Pflunger. He received us very kindly, but said it was absolutely impossible to find any accommodation in Oberammergau. We could, however, get unreserved seats for the performance on Sunday, but would have to be there early in the morning, say, about six o'clock. He also said that if we could arrange it, we could have accommodation in Unterammergau, a distance of about three miles. I accordingly arranged to keep my carriage and drove to

Unterammergau, where we found lodgings with a forester, who was a connection of Pflunger. As it happened we secured better accommodation than we could possibly have had in Oberammergau, as being forester he was able to give us game—Hirschbraten, hare, etc., which his wife cooked exceedingly well. We were therefore very comfortable, the only inconvenience being that we had to start so early to secure our places, which, however, we were able to do by making use of the carriage.

We were in our seats about six o'clock, and at about twelve o'clock there was an hour's interval for refreshments. As our seats were not reserved we could not leave them, but outside the building we were able to get sausages and bread, and two large mugs of beer, all of which were excellent, which Justus and I secured and brought into the building, where we made a very good lunch. The performance was so excellent and so interesting that we felt no fatigue, although it lasted until late in the afternoon.

Herr Pflunger, who had taken the part of Christ previously, was a very handsome man, and represented the character in that respect much better than Herr Meyer, who took the part on the present occasion. Pflunger now took the part of Moses, being too old to stand the strain caused by the crucifixion.

I had brought with me an account of the play and the acting on previous occasions, written by Emil Devrient, the great German actor, containing portraits of all the principal characters on the occasion of his visit, which I had left in my bedroom, and when we returned to our lodgings the wife of the forester with profuse apologies for examining it, said she could not resist it, as it contained

a portrait of herself as the Virgin Mary twenty years previously.

In April of the same year, 1880, I went to Arcachon, where my eldest daughter, Julia, had passed some time with my brother-in-law Talbot Baines and his family, who were settled there. As it was not the season, the large hotel there was nearly empty, and instead of taking an English breakfast, I took an early cup of coffee and a *déjeuner à la fourchette* at ten o'clock. At this meal there was only one gentleman, a great invalid staying at Arcachon for the benefit of the air of the pine forests, which was considered beneficial in cases of consumption. Of course I took my other meals with the Baines family. The only amusement was riding through the forest, which we did nearly every day.

It is well known that that tract of land between Bordeaux and Bayonne, consisting mainly of sandhills, had been planted with a special pine tree called Pin Maritime, which flourished in the sandy soil, and when the trees attained a certain age they were regularly tapped to collect the turpentine. In this way the forest, which was owned by the State, was scientifically cultivated and regularly visited by pupils from the Government schools for forestry at Nancy.

One day, in the hotel, I was surprised at finding at this season of the year, a large body of young Englishmen, who, I found on enquiry, were studying, by permission of the French Government, the science of forestry for service in India. These students were accompanied by Colonel Pearson, whose acquaintance I made, and whom I found to be a most interesting man. He was related to Sir Robert Cunliffe, the Member for Flint.



MRS. HARLEY, FORMERLY EMMA MUSPRATT

I had come to Arcachon to take my daughter back to England, and as she had received much kindness from the English families permanently resident in Arcachon, I invited them all before leaving to an evening entertainment at the hotel. The presence of these young English students was very fortunate, as I also invited them to join my party, which we kept up, dancing, to a late hour. On the whole, my visit to Arcachon was both pleasant and instructive, as I learnt a great deal about the cultivation of forest trees from Colonel Pearson.

In the autumn of 1884 I had arranged to go with Dr. Harley, his son Vaughan, and my daughter Julia to the meeting of the British Association in Montreal. We left by the *Parisian*, a new steamer of the Allan Line, which had granted special arrangements for members of the Association. On board we found the President and all the most celebrated scientists; the voyage was, therefore, very pleasant. When we approached Newfoundland, for two days there was dense fog, but at the entrance to the St. Lawrence we saw a number of icebergs, the weather having become exceedingly cold.

We arrived at Montreal on August 29th, and were lucky in getting good and ample accommodation at the Windsor Hotel, although many gentlemen had to sleep with others in their rooms. The proceedings of the Association were much the same as in an English town. We were received by the Mayor, and had several receptions and popular lectures. Professor Lodge delivered a most interesting lecture to a large audience, suggesting the removal of fog by means of strong electric currents. But although he proved that the atmosphere could be cleared of fog, this means of dispersal has not been generally adopted.

Professor George J. Brush, of Yale University, arrived on the second day, and I was very glad to have an opportunity of meeting him again, and arranged that on our return home through the United States I and my daughter would stay with him in New Haven. I also found in the railway carriage, when proceeding to Ottawa, an old fellow-student of mine at Giessen, whom I had not seen for thirty-four years.

After visiting Ottawa on the 30th, we decided to go West, with a view to seeing Yellowstone Park, going on afterwards to California, and returning home through the United States. Other members of the Association went West to Winnipeg, and some distance by the C.P.R. to the new provinces and Manitoba. Some were foolish enough to proceed to the meeting of the American Association for the advancement of Science, in Philadelphia, where they suffered severely from the excessive heat, and regretted that they had not followed our example in avoiding the long railway journey in the hot weather by making our way West principally by way of the St. Lawrence and the Great Lakes.

We went by steamer from Montreal to Toronto, passing the Thousand Isles, and from Toronto we went for a day to Niagara to see the Falls. The weather was extremely hot, and we descended behind the Falls, where there was accommodation for dressing and enjoying a most delightful bathe, which under ordinary circumstances is too cold to be pleasant.

From Toronto we took the steamer and passed through Lake Huron and by Sault St. Marie into Lake Superior. This lake is so large that some of the members suffered from seasickness owing to a storm. In traversing it we took two days, landing at Duluth, a great centre of the

trade in corn. From Duluth we went to St. Paul, where the Missouri, the "Father of the Waters," is 1300 feet broad, although 2200 miles from its mouth.

We travelled then by the Northern-Pacific Railway, which had only been opened the year before. The journey from St. Paul to Portland and Oregon occupied four days, and proved very interesting. The whole of the country forty years before was principally occupied by various Indian Tribes, and is very well described by Catlin, who wrote a most interesting book describing his life among the Indians, and being an artist he illustrated it by pictures, which very faithfully represented that part of the country called the "Bad Lands."

The country, even when we passed through it, was covered with skulls and skeletons of buffaloes, and tin cans which formerly had contained pressed meat, cast away by emigrants and travellers.

The United States Government had set aside a portion of the territory of Wyoming and Montana to be reserved as a National Park, but until the opening of the Railway it was very inaccessible.

After travelling 1130 miles in two days, we came to Livingstone at an altitude of 4450 feet, where we changed to a small train which went up for fifty miles through very rocky scenery, to Cinnabar, whence we were conveyed in a spring waggon through the first cañon of the Yellowstone River to Mammoth Hot Springs just at the entrance to the Park, which is very properly called "Wonderland." Here are two large basins in which are the geysers and hot springs of various kinds. There are also in the lower part large gorges in the mountain, which are called cañons, very interesting, but similar gorges can be seen elsewhere.

At Mammoth Springs at that time was the only hotel in the Park. The sleeping accommodation was not bad, but the food very inferior, consisting of elk steaks and beefsteaks alternately. As we had only two days at our disposal, we decided to visit only the geysers, to which we went in our American waggon, not a very comfortable mode of conveyance, for, as we had to drive very fast and the road being rough, we were jolted feet high in the air every five minutes or so, at one time on the edge of a precipice, and at another in deep water up to the horse's knees.

We lunched in a so-called camp, consisting of a number of tents side by side, in some of which were beds, and in a larger one in the centre a dining table. The scenery was very fine, and looked finer than usual, as there had been recent snow on all the mountains. In the evening we reached Marshall's Hotel, i.e. log house, much more comfortable than the tents, and kept by a nice family of that name, one of the settlers in the Park.

The air was cold, but warm in the sun, just like the Engadine. Indeed the scenery generally was similar to the Engadine, without the glaciers, which were, however, replaced by the geysers and hot springs. These are most wonderful and curious, as well as picturesque phenomena. The geysers are pools of hot water in a large basin, generally white as snow, from the silicious deposit from the springs. The colour of the water varies from deep blue to all shades of the rainbow. At intervals there is heard a bubbling, then large masses of steam appear as the water gets hotter, and then suddenly the water is thrown up, in some cases 250 feet high in the air, for a few minutes, and then gradually it diminishes in force and

sinks back into the earth, to repeat the same thing again in an hour, every two or three days, or a month, as the case may be. We were lucky in seeing seven or eight play, as our driver knew the signs and drove furiously to reach the springs in time for the display.

Near to Marshall's Hotel was a geyser which, owing to its playing regularly every hour, was called "Old Faithful." It played usually for about ten minutes, and then gradually sank down into the well, and after about fifty minutes there were signs of a little steam, and it shot up into the air to a height of about 200 feet. The waters are alkaline, containing also silica, and we proved their detergent properties by a gentleman, whose nose had been bleeding, throwing his handkerchief into the well just before it began to play, and it was thrown up perfectly clean.

Another interesting sight was a large spring of hot water (not a geyser) called "Firehole," on the borders of a river into which it constantly flowed, and for a distance of about half a mile the water on one side of the river was hot, and on the other side cold. Here there is a ford in the river, which we crossed, and afterwards passed through beautiful woods to the Excelsior, the largest geyser in this land of wonders, but unfortunately we did not see it playing. Other objects of interest were the mud springs, which throw up mud instead of water, one of which is called the Devil's Paint Box.

We returned to Mammoth Hot Springs by a different route, i.e. a road simply formed by cutting down trees to make a clearance of about 12 feet wide. In the middle of the road were many stumps of the trees remaining, and it was marvellous how the horses picked their way between these obstacles without stumbling.

On the way we passed a large rock consisting of volcanic glass or obsidian, and as there were fragments lying about, we took some specimens to be added to a few other small minerals which were interesting from a scientific point of view. After passing this rock we noticed a man on horseback following us, and in the evening after taking dinner in the hotel we were visited by a policeman, or a messenger, who summoned us to appear before the magistrate, for a breach of the rules which had been laid down to prevent people taking away specimens, as large quantities were being removed by people who took them away for sale, and seriously damaged some portions of the natural beauties of the park.

Of course we explained that we were scientific men, and only took these small specimens for scientific purposes ; but they said we must appear before the magistrate. We therefore went to a small court-house, accompanied by other tourists who had done the same thing. The proceedings before the magistrate were very amusing. One of our travellers, an American lawyer, raised objections which brought up the whole question of the conflict between the laws of the State of Wyoming and the laws of Congress. However, the magistrate decided against him, and accepted the responsibility, and after some considerable discussion, on our giving an assurance that we would not sell the specimens, we were discharged. I forget whether he imposed a small penalty or not.

We now resumed our journey to Portland, joining the Northern Pacific Railway at Livingstone. We travelled in the Pullman car, but were fortunate in getting what is called the " drawing-room " car, which is quite private,

and for the night contained four beds. On the train Mr. Drexel, of the well-known banking firm in Philadelphia, had a private car which could be detached from the train at any station at which the hirer wished to stop, and which he had taken on to Cinnabar. During the two days there we had made the acquaintance of Mr. Drexel and his two daughters; and on our journey to Portland he frequently invited our party to join him in his private car, where we often took tea. He and his family were very pleasant, and added much to the enjoyment of our journey.

After travelling about 500 miles from Livingstone, passing through the Bozeman Tunnel, which pierces the mountain a distance of 3610 feet, at an elevation of 5565 feet above the sea level, we entered Oregon and reached the Columbia River, along which the railway skirts for three or four hundred miles through the most magnificent scenery, with snow-clad mountains in the distance, amongst them, Mount Hood, 11,000 feet high.

The view along the river is most varied, for long distances bordered by forests, and in other parts through rocks of lava and limestone which assume in places most remarkable shapes, having the appearance of castles, reminding us of Dovedale in Derbyshire on a large scale. As this time of year, October, was the so-called "Indian Summer," the trees in the foreground showed the most beautiful colours, varying from green to bright red, reminding me of the colours in Crosbie's celebrated picture, which until then I had thought exaggerated.

Behind us was a pine forest consisting of most magnificent trees of great height, and behind those again, at a great altitude, a range of mountains covered with snow.

The river teems with salmon, and on its sides can be seen several cascades, some many hundred feet high.

Near Rooster Rock, which rises out of the river, the railroad leaves the river and descends to Portland. Here we heard that the hotel at which we intended to stay had been burnt down the previous night. On asking the conductor of the car, who was a very intelligent man and had read Herbert Spencer and Huxley's lectures, he told us there was an hotel that he usually stayed at, which he thought we should find comfortable. We followed his advice, and found it all that could be desired and the food comparatively good, better than in some more pretentious hotels, the charge only two and a half dollars per day, everything included.

Portland, being the terminus of the Northern Pacific Railway, has had a very rapid rise. Fourteen years before the population was only 1103; in 1880 it had attained 23,000, and in 1884 between 30,000 and 40,000. A large number of Chinese had been employed in the construction of the railway, and they formed a large portion of the population at that time. The town had become the centre of a great trade which required a large fleet of ocean steamships, and great cargoes of grain and canned salmon left the Columbia River for foreign ports. The canning industry, the product of the Columbia River fisheries, developed astonishingly within a very few years. The town, like all new American towns, was built of wood, and fires were of daily occurrence. On the night of our arrival a fire broke out not far from our hotel, and we and nearly the whole population went out to witness it.

There was a Chinese theatre in the town, which we

visited with great interest. As a rule the drama takes some days, possibly weeks even, for the performance, so we only saw what might be called one act. We also went to a Chinese restaurant, after having visited a shop served by Chinese, where we made a few purchases. We asked the proprietor of the shop to take us to a Chinese restaurant which he frequented, and to order for us a Chinese dinner such as he might have ordered for himself.

First there were on the table a kind of rice cake, ginger, melon, candy, and green oranges. We were then served with tea in cups which we poured out and drank. Next we had a small pudding of shrimps, pork, and other ingredients. This I did not like. But another dish, of minced meat and onions, was better. Almond dumpling flavoured with citron, and cold rice pudding followed, then dough-nuts stuffed with melon and linseed, and round cakes like shortbread. This, with cigarettes, a hookah or water-pipe, and several cups of tea, completed our dinner, and I felt nearly as empty as I did before I had it.

We proceeded by steamer from Portland to San Francisco, occupying about two days. We slept in a cabin on deck, with three berths one above the other. Harley in the bottom one, Vaughan in the middle, and I on the top. This is the only time I have ever seen a similar arrangement.

We were disappointed with the first appearance of San Francisco, on account of the fog. We put up at the Palace Hotel, but except for its size it was not better than any other. We, however, enjoyed excellent fruit of all kinds. After a couple of days we proceeded to Yosemite Valley, which has often been described, and the mountains, though fine, are not more beautiful than

in many other parts of the world. The most remarkable sight, both here and on the Columbia River, is the size of the trees, some of them being 300 feet high and about 3000 years old, with most wonderful and brilliant shades of colour.

We returned from the Yosemite Valley to Sacramento, the capital of the state of California, with a very fine capitol building; and continued our journey to Salt Lake City, occupying two days and nights. Salt Lake City has been often described, but two of our old servants were among the first settlers, and, of course, we called on them. One was married, and she was the only wife. I asked her how the families get on where there were more than one wife, and children of different mothers. She said there was not more quarrelling than there was in the other families. It happened to be the Conference week, and we visited the Tabernacle. There was a large congregation of five or six thousand people. The hymns were sung to old negro melodies, and there was nothing specially remarkable, except the ugliness of the women, which was striking.

We then started towards the East, and spent four days and nights in travelling to Chicago, passing over the Rocky Mountains to Denver by a narrow-gauge railway. This railway is fine engineering work, and the highest part is about 10,000 feet above sea level. The air was delightfully invigorating, and although the sleeping cars were not as comfortable as those on the broad-gauge line, we arrived at Denver without feeling much fatigued.

From Denver we continued our journey to Chicago, which I did not find very interesting, as the principal sight was the slaughter-houses, where pigs, after being

killed, were cut up by machinery, producing hams, bacon, and offal. We all felt a great change from the bracing air of the mountains to the relaxing air of the city on a lake.

We proceeded to Washington by rail, a long journey from Chicago. The weather was very hot, and we only stayed a couple of days. Harley and Vaughan went on to Philadelphia and New York, as they were obliged to return home, but Julia and I were glad of a couple of days' rest, for altogether during the last month or so we had slept seventeen nights in railway trains and steamboats, and but fourteen nights in hotels.

We then went through Philadelphia, where we stayed a day or so, and on to New York. From New York we went to New Haven, and spent a couple of days very pleasantly with Professor Brush, and saw some of the other Professors of the University, among them Samuel Johnson, Professor of Agricultural Chemistry, whom I knew well as a student in Munich, but had not seen for thirty years. My old friend Brush died on February 26th, 1912.

We returned to New York and saw the Rikers, returning home in the *Celtic* on October 23rd. On the whole this tour was extremely interesting, as we came in contact with many scientific people, members of the British Association; and in the Western States, and on the Pacific Coast, the inhabitants are more entertaining and original than the cosmopolitan crowd in New York.

CHAPTER XIX

DURING the years 1887, 1888, and 1889, I paid several visits to Italy, accompanied by my wife and daughters, principally to the Italian Lakes, and Florence, Pisa, and Bologna. In 1890 we visited Venice, and there met Mr. Philip Rathbone, who was also travelling with his wife and daughters. This made our visit very entertaining and instructive, as Rathbone was a connoisseur in art and well acquainted with all the sights of that beautiful city.

In 1891 we went to Rome, putting up at the Hotel de Russie, on the Piazza del Popolo, and here we found Mr. and Mrs. Philip Rathbone, their two daughters, and youngest son, Edmund, an architect. As we did not arrive in Rome till rather late in May, most of the English people had fled, as they were afraid of the heat. This made our residence more agreeable, as the hotel was not crowded, and the galleries, etc., could be visited with much greater comfort than in the height of the season. We were fortunate in having an introduction to Dr. Charles, a noted archæologist, and he came with us on more than one occasion to the Forum to point out characteristics which would otherwise have escaped our observation. Between Mr. Rathbone and myself the ladies of our party spent a strenuous time, for Philip Rathbone was an indefatigable sightseer, and as his hobby was mediæval and ecclesiastical Rome and mine



MRS. E. K. MUSPRATT IN MIDDLE LIFE

classical Rome, our time there was very fully occupied. My daughter Hildegard, now Mrs. Gordon-Brown, being of a frivolous temperament, declares that her most vivid recollection of that visit was well-earned tea on the Pincian after the day's work was over! One evening, being myself unwell, the rest of the party elected to go to the Opera, but upon being questioned by me afterwards as to what they had seen and heard there, not one of the party could recollect anything—they had all been asleep!—at last, one member with an effort remembered that the Opera was a new one called *Cavalleria Rusticana*, and the principal singer someone of the name of Calvé. Six months later Calvé and the *Cavalleria Rusticana* took England by storm! There is some excuse for the party because they had done ten hours' conscientious sightseeing during the day with the barometer at 110 in the shade.

We proceeded by rail on May 18th to Orvieto, where this year was celebrated the Quincentenary Foundation of the Duomo, where the miracle of the Corpus Christi occurred. This was celebrated by a wonderful festival lasting over a fortnight. The city itself is situated on a high hill, and we ascended from the station by a funicular railway.

The Duomo is a very beautiful building, shining outwardly with mosaics depicting scenes from the life of Christ, and inside black and white marble relieved by some wonderful pictures by Signorelli.

The next day there was a large procession through the streets, headed by an archbishop and about seventy bishops. Although I had seen many Corpus Christi processions in Munich, this was by far the most imposing,

and the ceremony in the Duomo as beautiful as any I had seen in Rome on great occasions.

Mr. Rathbone and his two daughters returned with us to Rome after about two days, but Mrs. Rathbone and her son wished to remain in Orvieto a little longer. We descended by the funicular to the railway station, and, of course, registered our luggage for Rome. Mr. Rathbone, who was very absent-minded and of whom many interesting anecdotes are related, became very excited, and wanting to know what had become of his portmanteau, sent up a messenger to ask Mrs. Rathbone to send it down, but she replied she had not got it, so we had to leave without it. On our arrival at the hotel in Rome, the portmanteau was found never to have been to Orvieto, but had been at Rome all the time. How Rathbone managed to dispense with it during the two days was never explained.

During our stay in Rome we visited the baths of Diocletian, which have now been turned into a museum. In part of the building a sculptor, Mr. Ezekiel, had his studio. He was an American, and had been many years in Rome. In his studio I was much struck by a bust of Shelley the poet, and purchased it. Since then, in 1908, a movement has been got up to purchase a house in the Piazza di Spagna, where Keats lived, and a committee formed to obtain funds for purchasing the house and converting it into a museum in commemoration of Shelley and Keats, where numerous interesting objects, amongst them many first editions of both poets and other objects connected with them, are exhibited.

Later, when visiting this museum, I recognised a copy of my bust of Shelley, and on inquiry found it was a

replica made by Ezekiel the sculptor and presented to the Committee. Ezekiel was a great friend of Cardinal Hohenlohe, who had given him two or three rooms in the Villa d'Este, where he could live and work during the hot weather. He invited us to take tea with him there, which we did, combining with it a visit to Albano and Hadrian's Villa.

On June 5th we visited Perugia, where we stayed some days, as there was an excellent hotel, and we made it a centre for many excursions in the neighbourhood. Among them was a trip to Assisi, where there are two churches, in one of which are the celebrated frescoes by Giotto, illustrative of the life of St. Francis the founder of the Franciscan Order.

We returned to England via Genoa, Aix-les-Bains, and Paris.

In 1892, accompanied by my wife and daughter, Hildegarde, and her friend, Miss Evans Williams, I went to Leipsic, where we put up at the Hôtel de Prusse. One of the reasons that brought us to Leipsic was that at this time Professor Thiersch celebrated the twenty-fifth anniversary of his appointment to that University—his so-called "Jubilaeum." In the morning he received a number of deputations and congratulations, and in the evening there was a large dinner which I attended, seated next Professor Ludwig, the celebrated physiologist.

- Dinner began at 5 o'clock and lasted until the small hours of morning. Between each course speeches were made, and the guests moved freely about from one table to another, so that they were not forced to make conversation to one neighbour all the evening. It was

served in a large hall, with a gallery running round it, where the ladies sat and listened to the speeches, and where at any rate the younger gentlemen freely resorted, and where sparkling moselle and conversation formed a light relief to the serious business in progress down below.

The Hôtel de Prusse at which we stayed, being in course of rebuilding, only part of it was occupied by guests, who were very few in number. The proprietor was very musical, and had married an American lady, a pupil of the Leipsic Conservatoire. He was a great friend of Wagner's, who always stayed in his hotel when in Leipsic. He told me several anecdotes of the great composer, and he possessed a small manuscript piece of music which Wagner had composed and presented to him on leaving the hotel.

While we were staying in the hotel the landlord invited me to a supper in honour of Liszt, who had been sent to Leipsic by the Grand Duke of Weimar, to present a decoration to Mr. Nikisch, the leader of the orchestra there. Several speeches were delivered, and I had the pleasure of hearing Liszt speak in response to the proposal of his health.

From Leipsic we proceeded via Verona and Florence to Naples, which I had not seen for many years, and extended our tour to Sicily, never having been there before. Travelling by steamer to Messina, we immediately proceeded to Taormina, one of the most lovely spots in the island. On the steamer we met a very pleasant young man who spoke English, and on making inquiries as to the hotels in Taormina, he informed us that most of the English went to one near the theatre, but that his father was proprietor of an hotel very beautifully situated, and

where he thought we should be comfortable. He was very useful as a guide to all the sights, and we made several excursions in the neighbourhood.

The hotel proved to be thoroughly comfortable and homely, with a charming court-yard, gay with oleanders in green pots, whose rosy blossoms lent an additional value to the wonderful wine-coloured ocean, with its sapphire shadows that lay deep down below, and over which this little tiled court-yard seemed perilously to hover as though making ready to plunge into the glistening waters below.

The beauties of Taormina have been expressed many times in pen, pencil and colour, but they will always burst with a shock of glad surprise upon the visitor whether it be his first or twentieth visit there, and the panorama as seen from the old Greek theatre, with its golden lichen-covered walls and carpet of crimson poppies, is one of which no words could ever express nor pigments convey the intense beauty.

Taormina lies on rather high ground, and immediately below lies Naxos, which was the first Greek Colony planted by Greece in Sicily in 735 B.C., now covered by a lemon plantation.

We then went to Syracuse, where we stayed some days. The Corinthians in 734 B.C. conquered the small island of Ortygia, which with Plemmyrium, fences in an inlet of the sea forming the Great Harbour of Syracuse. By extension on the mainland, the town, including Achradina, became the largest and richest of the Greek colonies, with a population of 500,000, and in 415 B.C., when Athens was at the zenith of its power after the death of Pericles, it began a war for the conquest of Syracuse,

which lasted for some years, and ended finally in disaster.

In 414 B.C. the Spartans came to the relief of the Syracusans, who were on the point of surrendering to the Athenians. With the aid of the Spartan Gylippus, the citizens gradually recovered strength, and in 413 B.C. gained possession of Plemmyrium, the promontory at the entrance to the harbour opposite Ortygia, then occupied by Nicias. This was followed by various battles, with varying success, but finally the Athenians were defeated in a naval battle; disease having broken out, and dissensions arising among their generals, the retreat was finally determined on. The decisive encounter so graphically described by Thucydides adds additional interest to the great harbour where it took place.

The two generals, Demosthenes and Nicias, were executed, and the prisoners were confined for eight months in the Latomiae. The Latomiae were quarries left after the stone for the building of the city had been extracted, and the sufferings of the prisoners were intense, when at midday the sun's rays poured down upon them, without any shelter or movement of the atmosphere. The Latomiae are now covered with luxuriant vegetation, and are well worth a visit.

There remain at the present day many objects of interest, such as the Theatre, the Altar of Hiero II, the Amphitheatre, the Palaestra, the Latomiae del Paradiso, Di Santa Venera, and the Street of Tombs; also the Epipolae, so named because it is the highest part of the city. Along the banks of the Cyane Brook is grown Papyrus, planted by the Arabs, and imparting an almost tropical character to the scene.

From Syracuse we proceeded to Girgenti, the Greek Akragas, founded by colonists from Gela in 582 B.C. The most interesting objects in Girgenti are the temples, similar in architecture to those at Paestum, which I had already seen. We accordingly drove first to the Grand Hotel des Temples, but it was closed, as there were no travellers in Sicily at that time, on account of the supposed heat, which, however, proved of great advantage to us, as we hardly met any other sightseers.

We took up our quarters at an hotel above a restaurant in the town, and there found excellent accommodation, with large rooms, and the food good and much more varied than that usually provided at so-called first-class hotels, where the English most do congregate. We visited the temples, excellent examples of Doric architecture, some of them in fairly good preservation, but others in ruins. The Temple of Zeus was never completed, but is the largest Greek temple of antiquity, erected in the first half of the fifth century B.C.

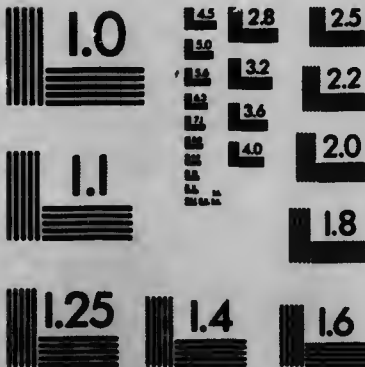
From Girgenti we went to Palermo, the largest city in Sicily, beautifully situated under Monte Pellegrino. It is full of interest from an historic and artistic point of view. We visited the Church of San Giovanni degli Eremiti, one of the earliest existing Norman churches, founded in 1132. Adjoining the church are cloisters of a later date, similar to those at Monreale. The Palazzo Reale was built at various dates, the nucleus of the building is of Saracenic origin, additions being made by the Normans, Frederick II, and Manfred.

The Capella Palatina is a perfect gem of mediæval art. The walls are covered with glass mosaics of the best period, and date from the reign of King Roger, represent-



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ing subjects from the Old Testament and the lives of Christ, St. Peter, and St. Paul. We next visited the museum, full of objects of interest found among the ruins of Girgenti and Selinus. The Sala de Selinunte contains the celebrated Metopes of Selinus. As the city of Selinus was founded about 638 B.C. and destroyed 409 B.C., these metopes illustrate the development of Greek art during that period. The advance in beauty is apparent even to the untrained eye.

We also visited Monreale, where William II erected the famous cathedral 1174-89, the walls of which are covered by mosaics occupying an area of 70,400 square feet, and of great beauty. The cloisters of the former Benedictine Monastery adjoining the cathedral are all that is left of the original building, and are the finest extant in the Italian Romanesque style. The pointed arches are adorned with mosaics and supported by 216 columns in pairs; the capitals are all different, and the richly ornamental shafts also vary.

We returned by steamer to Naples, June 11th, and remained there until about the 14th, when we returned to England.

In 1893 I visited Greece, accompanied by my wife and daughters, Hildegard and Stella, the latter my youngest daughter, who is now the wife of William Permewan, M.D., F.R.C.S., lecturer on Laryngology in the University of Liverpool, who was elected a member of the City Council, and is actively associated with the Liberal party.

Both my daughters and her husband are devoted to music and are excellent amateur singers. Edmund Rathbone also formed one of the party. We started on March 17th, and went straight by the St. Gothard to Milan.

My daughter Stella had passed the winter in Berlin studying music and German, and my eldest son Max was studying at the Zurich Polytechnic. We picked them up at a small station just under the Rigi, so that we now formed a party of six.

From Milan we travelled by rail down to Brindisi, occupying two *salon-lits*, three in each compartment. It was a long and rather tiresome journey, and we arrived at Brindisi half famished about ten o'clock at night, but could not go on board the Austrian Lloyd steamer till about eleven o'clock, when the restaurant was closed. With some difficulty we got a box of sardines, bread and butter, and a bottle of Vöslauer, which we enjoyed, and then went to our bunks.

We landed for a few hours at Corfu, and then proceeded to Patras in sixteen more hours. At Patras we were besieged by a number of men offering their services as guides, and we selected one who spoke excellent English, having been born and educated at Corfu while the Ionian Islands were under the protectorate of England. Constantine, our guide, proved an invaluable person in many ways, for although not communicative, nor a possessor of much classical information, he saw to our creature-comforts in a most exemplary fashion; beat down the exorbitant prices of rapacious innkeepers, and when we went on expeditions which took us beyond the possibilities of procuring food, would produce, like a conjurer, all sorts of unexpected dainties out of his capacious pockets. "Plenty food" was always his most comforting reassurance when physical hunger took the place of that for classical lore, an experience which in the sharp spring air of Attica was not infrequent.

We next took the train, which runs parallel with the Gulf of Corinth, for four hours and a half, to Athens. The journey up to Corinth was delightful, as the day was very fine. We were much struck with the colour of the sky and clearness of the atmosphere, which was even superior to that of Italy. Opposite, across the water, is a range of high hills, and many of the peaks were covered with snow, including Mount Parnassus.

We arrived at Athens in four hours and a quarter from Corinth, and put up at the Hôtel de la Grande Bretagne, opposite the Palace, where we stayed several days, visiting all the well-known sights. The most interesting were, of course, the Parthenon, and other temples on the Acropolis, and the Museum, with its most interesting collection of genuine Greek sculpture, differing from the sculpture galleries at Naples and The Vatican, where many of the statues are merely copies, the originals having been lost.

What most struck me was that as compared with Rome there are few remains of the later Middle Ages, and no buildings of importance after the classical period, when the architecture was purely Greek and surpassing in beauty even the Greek remains in South Italy and Sicily.

We, of course, made excursions to Marathon, Megara, Eleusis, and Salamis, and also to Nauplia, Argos, Tiryns, and Mycenae. We also visited the Hieron of Epidaurus, the most celebrated seat of the cult of Æsculapius, whose shrine was visited in ancient times by people from all parts, seeking restoration to health.

The theatre, which excelled all other Greek theatres in beauty and richness, lies on a spur of the Kynortion, and is ascribed to Polykleitos.

On our journey from Lucerne to Milan we had met Professor Mahaffy, whose acquaintance I had already made in connection with University College. He is a most interesting man, and has written much about ancient and modern Greek, speaking modern Greek with fluency. He gave me a letter to Dr. Dörpfeld of the German School at Athens, who was carrying on excavations in various parts of Greece, and continuing those at Troy. We had the good fortune to be in Athens at the time of the Easter celebrations, which take place twelve days later in the Greek Church than in ours. The day before Easter-Sunday, the peasants came in from the country in their native dresses, many of them carrying lambs about their shoulders in the manner seen in pictures of "the good Shepherd." These lambs were destined to be killed and cooked on wooden spits, at the street-corners the following morning, and all passers-by were hospitably asked to partake of the same. Eggs coloured red, and with devices symbolic of the crucifixion and resurrection, were also pressed upon passers-by with the words "Christ is arisen," a salutation which passes from mouth to mouth as "A Merry Christmas" does with us on December 25th. By the evening, a great crowd had collected in the principal square opposite the Cathedral, in which the Royal family were taking part in the midnight service preceding Easter morn. As the clock struck twelve the bells pealed forth, the Cathedral doors were thrown wide, and the great concourse outside cried with one voice "Kyrie Eleison," and the Metropolitan (or Archbishop), preceded by choristers bearing torches and singing chants, marched to a kind of arena which had been enclosed in the middle of the square, and in

which we had the good fortune to have acquired places from which we saw the procession.

When we called on Mr. Tricoupis, the Prime Minister, to whom I had a letter of introduction, it happened to be the birthday of Miss Tricoupis, and the reception-room was a bower of blossoms sent by her friends. She proved a most interesting and entertaining woman, and was the right hand of her brother and loved by all the people. Both she and her brother showed themselves most kindly disposed to strangers, especially the English, and upon our expressing a desire to pay a visit to the Vale of Tempé, although at first Mr. Tricoupis thought it might be inadvisable as Thessaly had only been added to Greece twelve years before, he promised to offer what assistance he could in the matter, and with this intention kindly gave me a letter of introduction to the Nomarch (or governor) of Larissa, capital of Thessaly.

After visiting all the objects of interest in the neighbourhood of Athens, we took a small coast steamer to Volo, whence is a short railway to Larissa. The sea voyage was most interesting, as we rounded Cape Sunium and proceeded past Chalcis and Euboea and Thermopylae. From this point we again saw Parnassus, which we had previously seen from the Gulf of Corinth, and this made a deep impression upon my mind, as to the smallness of the country of Ancient Greece, which has had so much influence on modern civilisation.

We arrived at Larissa, a town of marked Oriental character, with twenty-seven lofty minarets of the mosques, and put up at a boarding house, taking our meals at a restaurant in the town.

I at once called on the Nomarch to present my letter of

introduction from Mr. Tricoupis, but as he was not at home I left the letter with my card. In the evening when we were taking dinner at the restaurant the waiter informed me that a gentleman sent by the Nomarch was waiting in the hall. I at once told him to show the gentleman in. He said he was the Nomarch's secretary, and had been desired to inquire as to our object in visiting Larissa, and to promise any assistance in his power. I informed him that we wished to see the Vale of Tempé, and he inquired whether we wished for an escort. I told him "was for him to say whether an escort was necessary, and he replied that he "did not think so," and retired.

Early next morning we hired a carriage, and after proceeding about twenty minutes, we saw that a mounted escort of soldiers was following us, and they continued to accompany us for about five hours, when we descended at Baba, the entrance of the Vale of Tempé, where was a large khan. Having brought provisions with us, we asked for some of the wine of the country—the best I have tasted in Greece, where the ordinary wines are usually mixed with resin, and very disagreeable to the taste. However, some of the English residents in Athens have an idea that resinous wine is a preservative against malaria, and have become so accustomed to the taste that they prefer it.

The Vale of Tempé is a mountainous defile about four and a half miles long, between the precipitous sides of Mount Ossa and Olympus, through which the Peneios rushes to the Gulf of Salonika. The walk through the valley was very enjoyable, but on account of the lateness of the spring some of the trees were not in full leaf.

On regaining the entrance we started on our return

journey across the plains just under Mount Olympus. The day up to this time had been very fine, with brilliant sunshine, but in about an hour after leaving the vale a tremendous thunderstorm came on, and Jupiter seemed for a time to have resumed his usual practice of hurling thunderbolts. The lightning was very vivid, and as darkness was approaching it illuminated the whole plain. It was indeed a wonderful sight, but in spite of the tremendous downpour of rain we thoroughly enjoyed our excursion to this vale, so widely celebrated in song and myth.

We returned to Athens by the same route and began to arrange for our return home via Constantinople.

Among other pleasant persons we met at Athens, were Mr. and Mrs. Passpati of the well-known business firm of Liverpool. Everybody seemed to know everybody in Athens, and the Royal family met on almost equal terms with the haut-bourgeois. We constantly saw members of the Royal family out walking, as well as our own Queen Alexandra, who was spending a holiday with her brother at the time, but there was no rude staring at them, and they passed as unremarked as any private person might.

We proceeded by a steamer from Alexandria calling at the Piræus, and staying a few hours at Smyrna, where we landed and made some purchases in the bazaar. From this point on, the sail to Constantinople was very enjoyable, through the Dardanelles and the Sea of Marmora. We stayed about a week at an hotel in Pera, the Christian quarter, and visited the numerous mosques, many of which are very beautiful. The remains of old Byzantium are not numerous, and

amongst the most interesting are the walls, which up to the time of the use of gunpowder defied the Turks for several centuries.

From Constantinople we proceeded to Buda-Pesth by rail, a journey of two days and nights through Bulgaria. Passing through the wild Balkan country, an incident occurred which gave us an idea of the lawlessness of the country. The cook of the train, standing upon the little open platform between the carriages, was wounded by a random shot from a pistol fired at the train, for sport presumably, by some native of the country. The cook was not badly hurt, and a subscription was raised for him. The incident, however, caused much perturbation among the passengers, and made them doubtful of the security of the country we were passing through. The city of Buda-Pesth is very finely built, with wide streets, and situated on the Danube.

Up to this point all was new to me, but as I had visited Vienna on two occasions before we did not stay there long. The Ringstrasse, which has transformed the old city as I first saw it, and was now completed, serves to make Vienna one of the finest capitals in Europe. Returning to England we went through Munich, which, since I was there as a student, has been much improved and enlarged and is now one of the most beautiful cities in Germany, but to me it has lost some of its old charm since the friends of my youth are no longer there.

The following year, 1894, I went with my wife and two unmarried daughters to Spain, where I found many changes had taken place since I was there forty years before, owing to the making of railways. We journeyed from Paris to Madrid in the Sud Express, a *train de luxe*.

As I had three ladies with me I thought it desirable to engage a courier so as not to lose time in our visits to various places. The man professed to speak a little English and had been in England for some time, but we preferred to speak to him in French, which language he spoke with greater ease. He was not of much use when we were travelling by rail, as like all Spaniards, he was rather leisurely and dignified in his movements, so that I was able to do what was necessary much quicker than he could. He was of a lazy habit of body, and his constant suggestion to my daughters that "Maman sera fatiguée" was a gentle manner of hinting that he himself would prefer to drive; it was usually ignored by them much to his disappointment. My family were anxious to see the national sport of a Bullfight, and we with difficulty knocked this fact into our courier's head, as English ladies were as a rule too squeamish to witness bloodshed on a grand scale; he however finally procured tickets for the same, and on the morning of the day came proudly to us and said: "I have got tickets for the bullfight in the afternoon and also for the 'chicken' fight in the morning!" Needless to say we did not avail ourselves of the latter orgy and left the bullfight at an early stage in the proceedings.

From Madrid we went to Seville, where we stayed a few days, visiting, of course, all the sights, the most interesting being the Cathedral, the largest and finest in Spain, 413 feet long by 315 feet wide, and having seven aisles. The centre nave is magnificent, being 145 feet high and at the transept dome 171 feet. Contiguous to the Cathedral is the Giralda, or Campanile, which can be ascended by an inclined plane instead of stairs, and on a

mule if necessary. The Caridad, or almshouse for poor old men, contains a number of pictures by Murillo.

From Seville we went to Cordova, where is a magnificent mosque, so enormous that a large Catholic Church has been built in the interior. There are nineteen entrances to the mosque, now all closed save one. Within the mosque itself is a modern addition, called the Coro, built in the time of Charles V, who sanctioned its erection, but who, when he saw it, regretted that he had done so, saying, "You have built here what you or anyone might have built anywhere else, but you have destroyed what was unique in the world: you have pulled down what was complete, and you have begun what you cannot finish." It had necessitated the removal of a large number of columns which had originally been brought from Nismes and Narbonne, Seville, and Tarragona, while one hundred and forty were presented by Leo, Emperor of Constantinople, and the remainder from the temples of Carthage and other cities of Africa. Cordova is approached by a noble bridge of dark marble, so fine that it is said by the Spaniards that the French when they saw it asked "if it were not made in France"?

From Cordova we travelled to Granada, reaching that city about June 12th. We had intended staying at a hotel on the hill, to be near to the Alhambra, but having learnt that it had been burnt down, we put up at an hotel in the town itself, which we found very comfortable and the food excellent, but of course not the usual international table d'hôte, as most of the frequenters of the hotel were Spaniards.

The next day we drove up the hill to visit the Alhambra. The road passes through a magnificent avenue of elm

trees planted by the English early in the nineteenth century. The Alhambra, it is well known, was a palace of the Moorish Governors. The exterior architecture is not very striking, it having served as a fortress as well as a palace, but the interior is very beautiful, a fine specimen of Moorish architecture, which was, when first I saw it, injured by whitewash, but is now being restored. There are two or three Moorish buildings on the hill, which are also interesting, and the view of the country round is very beautiful. The Sierra Nevada are only a short distance away and are always covered with snow. There is a gap in the mountains which is called "El suspiro del Moro," or the last sigh of the Moor, as the Governors retired by that pass when pursued by the troops of Ferdinand and Isabella. The plain underneath, called the Vega, is one of the most fertile in Spain, and is now well cultivated. In the neighbourhood of the Alhambra numbers of gipsies have an encampment, and they are, or were, licensed beggars and gists of the place, although they doubtless add a picturesque note to the scenery. Their King was an imposing personality in a coat of many colours, bedecked with coins, and he might have stepped direct out of the Pirate scene in *Carmen*. He promised to sit for his portrait to my daughter Hildegarde, but was too drunk on the day to keep his appointment.

Returning to Granada for a night, we started next day for Seville on our way to visit the Rio Tinto mines, as I had letters of introduction to the agent at Huelva. He received us very hospitably, in what had been built for a large hotel, erected by a new company in which the Rio Tinto were interested. It had been expected that Huelva might rival the Riviera, as the climate in winter and early

spring was suitable for invalids. The enterprise, however, failed, and when we arrived there the hotel itself was closed, but we were accommodated in a most magnificent suite of rooms. The next day we went up to the mines by a railway forty miles long, and there we stayed the night at the Guest House, where we were hospitably entertained, and next day visited the mines.

The mountains surrounding the mines are now entirely bare of trees, they having been destroyed by the sulphurous fumes given off from the burning of pyrites. This has now been stopped, and a portion of the pyrites is used on the spot for making sulphuric acid and artificial fertiliser. The greater portion, however, amounting to, I suppose, over 1,000,000 tons, is exported. The ore as it is quarried is picked out so that what is required for shipment should contain at least two or two and a half per cent of copper. The remaining portion is piled up into heaps, and allowed to oxidise by exposure to the air and water; this after a couple of years yields a solution from which copper can be extracted by the so-called cementation process, and the precipitate, containing about seventy per cent of copper, is shipped, principally to England, to be refined. The water flowing from these heaps after the copper has been deposited flows into the river, which is coloured red by the oxide of iron—hence the name of "Rio Tinto."

The following day, as I wished to visit Merida, we took train by the newly opened Zaphra Railway and spent the night at Carceres. Next day we went by another railway to Merida, and on arriving put up at a small lodging or boarding house as there was no respectable hotel in the place. Merida is hardly changed at all since I saw it forty

years ago, when there was no railway and we had to approach it by diligence. The old Roman remains, aqueduct and theatre, which I have described in my previous visit, were enjoyed by all our party, and after a day's rest we continued our journey to Toledo, passing on our way through the same country I had previously travelled on mule-back. Toledo is one of the most interesting towns in Spain, and its Cathedral in many respects the most beautiful. From Toledo we returned to Madrid and then by express train passing through Biarritz and Bordeaux to Paris and thence home.

CHAPTER XX

ALTHOUGH associated more particularly with educational and political movements in my native town, I have been in no wise indifferent to its artistic and literary development, and I feel my book would therefore be incomplete without some reference to the subject. In writing this chapter I have been assisted by my daughter Hildegarde (Mrs. F. Gordon-Brown), who, after leaving Cheltenham Ladies' College, studied art in Paris and London, and frequently accompanied me on my travels in Italy, Greece and Spain.

Liverpool, from the eighteenth century, had amongst its merchant princes some who took an interest both in literature and art, pre-eminent among whom was William Roscoe, the biographer of Lorenzo de Medici and Leo X, and writer of several volumes of verse. He formed a collection of books and prints, part of which went to the Liverpool Athenæum, and a fine collection of old Italian and Flemish paintings, some of which eventually became the property of the municipality. These for a time were housed in the Royal Institution, but in 1892 they were transferred to the Walker Art Gallery.

In Liverpool's days of great commercial prosperity in the sixties and seventies, its men of business began to vie with each other in the matter of picture buying, and thus introduced into local circles the fashion of patronising

the Arts. In many cases owing to taking wisely the advice of experts rather than trusting to their own judgment, fine collections were brought together. Amongst those who had galleries of importance may be mentioned Ned Leyland, of the Leyland Line, who possessed a splendid collection of the pre-Raphaelite School, including Rossetti's "Blessed Damosel." His pictures, however, were dispersed after his death. Mr. Leyland is principally remembered by posterity on account of his lawsuit with Whistler over the sum charged by the Artist for the decoration of the famous "peacock room," when a startling amount of Whistlerian vitriol was poured upon the head of this unhappy patron, as he who runs may read in *The Gentle Art of Making Enemies*. Mr. (afterwards Sir) Henry Tate, the donor of the National Gallery of British Art, was also a Liverpool man. He possessed one of the finest collections of Watts pictures in the country. Thomas H. Ismay, of the White Star Line, had a good collection of modern paintings in his house on the Wirral side of the Mersey; so too had Holbrook Gaskell of Woolton, and others.

But the man who did most in the way of encouraging a love of art in Liverpool was my old friend Philip H. Rathbone. Philip had a genuine passion for pictures, and although his own particular "penchant" was the early Italian school, upon which he was an undoubted authority, he had a breadth of taste and discernment not only as to what was value in past work but of what modern productions would be of consequence in years to come.

This power of intuition with regard to the tastes of "après demain" brought him on many occasions into collision with the municipal powers of his day.

In 1873 Andrew Barclay Walker, a wealthy brewer, made the very handsome donation to his native town of a picture gallery with a view to encouraging a taste for Art, and providing accommodation for the annual autumn exhibition which was organised by a corporation committee in 1871. The gallery was opened in 1877, and it was afterwards enlarged at the donor's expense in 1884. The Queen conferred a baronetcy on Mr. Walker. The first curator of the Art Gallery was Charles Dyall, who held the position from 1877 to 1904, and he was succeeded by Mr. Edward Rimbault Dibdin, the present curator, who is a great-grandson of Charles Dibdin, the song writer, upon whose biography he is at present engaged.

Not, however, without heart-burning and passionate controversies was the Walker Art Gallery made as representative of varied schools of painting as it now is. Municipal councils are timorous and conventional bodies for the most part, with one eye upon "safe investments" and the other on Mrs. Grundy, and with a very deep-rooted suspicion of all that is novel and startling in the realms of art. It is here that a man endowed with the acumen and courage of Rathbone acts as an inspiring force, for with a real passion for and appreciation of art, and a breadth of mind equal to appreciating it in its most unforeseen expression, such a personality helps to brush away the cobwebs of prejudice and coward-convention and inspires, or to be more accurate drags at the heels of the possessor's enthusiasm, a timid and oft-times unwilling public.

Philip Rathbone acquired in time the position of practical dictator of the Art and Exhibitions Sub-Committee, who admitted his knowledge and somewhat

grudgingly trusted his judgments, though his choice of purchases oft-times brought opprobrium upon their heads from people, press and pulpit.

Without going so far as to say that I invariably admired his choice of purchases, there is no doubt that time has proved his foresight, and that many of the pictures purchased on his recommendation for the Walker Art Gallery are interesting and significant examples of vital movements in the history of contemporary art. Amongst these may be mentioned "Dante's Dream" by D. G. Rossetti, its mannered mediævalism being so characteristic an expression of the poet-painter's own personality as to escape the charge of affectation.

W. Holman Hunt's "The Triumph of the Innocents" is another pre-Raphaelite conception whose purchase was by no means generally approved of; but the outcry raised by these pictures was as nothing in comparison with the vituperation which followed upon the purchase of E. A. Hornel's "Spring."

The exhibition of 1892 contained a group of pictures of members of the Glasgow School, and we looked upon the purchase of "Spring" as a personal insult to our common sense! Press and council rang out in protest; families were divided on the subject, and dinner-parties demoralised! The hooting has long since died down, and the Glasgow School now holds an honoured position in the history of modern Art; whilst no municipal collection considers itself complete without some specimen on its walls of Hornel's apple-cheeked children and giant blossom. Greiffenhagen's "Idyll" again was dubbed "immoral" by a section of the press and public, and the Rev. T. W. M. Lund found it incumbent upon him-

self to preach a sermon proving that there was nothing inherently immoral about (as one of the young Rathbones expressed it) "a young man kissing a young woman in a field."

Although Liverpool cannot lay claim to having led the way in matters artistic, or proved itself an artistic centre, as Glasgow is, for instance, it has had its fair share of some who have come to honourable acceptance in the world of art. Among these may be mentioned Alfred Hunt, W. L. Windus, J. W. Oakes, R. Ansdell, W. Huggins, W. Daniels, J. Robertson, Sir Luke Fildes, Lamorna Birch, Wilson Steer, T. B. Kennington, Talbot Kelly, William Eden and Terrick Williams. Others who still make Liverpool their home include W. J. J. C. Bond, George Cockran, A. E. Brockbank, W. Follen Bishop and J. McDougal. Then again there are many artists who are not native to the place, but whose work is associated with it. Amongst these may be mentioned G. Hall Neale, whose wife also is a portraitist of much charm, R. E. Morrison, John Finnie, Robert Fowler, etc. Other artists who have occupied positions at the University Art Studio, the Sandon Studios, and the City School of Art are Charles J. Allen, the sculptor, whose fine statue of Queen Victoria with accessory groups stands at the top of Lord Street; Robert Anning Bell, the decorative artist; R. A. M. Stevenson, the celebrated art critic, cousin of the author R. L. Stevenson; Herbert Macnair (another eccentric Glaswegian); Augustus John; Gerard Chowne; F. V. Burrige; Conrad Dressler, and others.

Philip Rathbone was the most original member of a family celebrated in Liverpool for their high principles, intellect and philanthropic activities. Original, even

"eccentric" in its dictionary sense, he undoubtedly was, for he deviated considerably from established forms and rules, but underlying his outward peculiarities there dwelt a very level head, a sound knowledge of men and things, a well-balanced judgment, and a warm and kindly heart; and absent-minded as he appeared to be, I would very much like to meet the man who ever caught Philip napping. A Liberal in politics, he was keenly interested in the affairs of his native city, and sat on the city council for many years, finally becoming an alderman of that body. His penetrating, somewhat rasping voice was invariably listened to with deep interest and respect, though not always with agreement.

Anyone less "aldermanic" in appearance it is difficult to conceive; he was small and slight of figure, rather inclined to stoop at the shoulders, with a large head, a drooping black moustache, dark hair, a lock of which usually fell over the eyebrows, large short-sighted eyes and clean-cut features. He was rarely without a cigarette or a pipe in his mouth, and always wore eye-glasses. He carried his clothes in easy fashion so that they seemed to partake somehow of their wearer's personality; his tie for instance was usually away from its centre of gravity, whilst his top-hat, which he always wore on occasions of civic importance, never seemed quite at home on its possessor's head, as though it realised that he did not take what it represented sufficiently seriously.

He was an excellent raconteur, a "bon camarade," a romantic admirer of the fair sex, in praise of which he wrote many poems, including one, "Galatea," written originally for the beautiful Mary Anderson, which was used afterwards at many other shrines. Mrs. Rathbone,

his wife, who was a Miss Greg, was a charming woman, original and unconventional like her husband. She was graceful of figure and movement, curiously impersonal and elusive in manner, but full of feminine charm. I have already alluded to Philip Rathbone's absent-mindedness when we travelled together in Rome, but there are many stories current in Liverpool society on this subject, some of which are worth recording. On one occasion on taking his hostess in to a dinner which did not meet with his approval, Philip Rathbone, after struggling through two courses, turned to the lady and addressed her thus: "You really must excuse the hopelessness of the dinner. I have been advising my wife for the last three months to dismiss her cook, who is absolutely incompetent at her job, but for some reason she still keeps her."

Having asked friends to dinner one evening, he and his family forgot all about it and were much perturbed upon seeing carriages come up to the door just after they had settled themselves at table. The only thing to do was to wait until the visitors had got safely into the hall, when the whole family climbed out of the dining-room window, crept round to the back door and entered the drawing-room to welcome the unexpected guests.

Apologising for his wife's absence from a dinner-party on one occasion, Rathbone explained to the hostess that it was owing to her face being "out of drawing."

Another day he met a friend in town and asked him to dinner, offering to drive him up. In the evening, when nearing the house in the carriage, he turned to his friend and said: "Now I know you asked me to drop you somewhere about here; will this do?" The unfortunate

man tried hints, but his host not seeing them, the carriage was stopped for him to descend, and, having cancelled dinner at his own house on receiving the invitation, he was obliged to return to town. On friends arriving at the house to dinner one evening, the ladies were shown into a bedroom where they found their hostess only half-dressed. They were rather flabbergasted, but not so Mrs. Rathbone, who, smiling cheerfully, remarked: "When I came up to dress I found that it was a bit late, so I put back dinner for half an hour, hoping you'd understand and not turn up till eight."

As chairman of the Art and Exhibitions Sub-Committee, Rathbone visited most of the artists' studios in London every year with a view to inducing them to send some of their works to the Annual Autumn Exhibition in Liverpool. On these occasions he made friends among literary and artistic people, becoming a member of the Savage Club, where he was always welcomed on account of his originality and good stories.

Sir Alfred East related that on one occasion before the exhibition was opened, Rathbone invited the members of the Hanging Committee to dine with him at seven o'clock. On his leaving the house at that hour he met his invited guests coming to him, while he was under the impression that he was to dine with them.

By Philip Rathbone's death Liverpool lost a son who was not only a source of intelligent gaiety on its social side, but one who by his artistic tastes, sound sense, and enlightened principles proved an influence for progress and reform in all branches of municipal and commercial activity, whilst the loss of his original personality was mourned by a large circle of friends.

The Liverpool Art Club, of which I was a member, started in 1872 at Sandon Terrace, and in 1881 entered its own building at 98 Upper Parliament Street, where it closed in 1895; its most important activities were in Sugnall Street.

The principal founders were Enoch Harvey, Benson Rathbone, Philip Rathbone, (Sir) Edward Russell, Edward Samuelson, and others. These were joined later by G. A. Audsley, James L. Bowes, Edgar Browne, Shadford Walker, John Finnie, and Henry E. Rensburg, who was honorary secretary for ten years (1885-95). The Club was opened with an Oriental Exhibition, arranged by J. L. Bowes and George Audsley, and among those who visited the exhibition was William Ewart Gladstone. Many distinguished guests were entertained there, amongst them being the painters: Sir Frederick (afterwards Lord) Leighton, P.R.A.; Sir Hubert Herkomer, R.A.; and Onslow Ford, R.A. The actors: Sir Henry Irving, J. L. Toole, Barry Sullivan, and Mrs. Kendal. The authors: Lord Houghton, Professor Agassiz and Hall Caine. The musicians: Max Bruch, Faany Davies, Johannes Wolf, Liza Lehmann, etc.

During its last ten years the Club became the home of classical Chamber Music, and many delightful concerts were given, and various exhibitions of Art and Handicrafts were arranged during its existence.

The Public Museum in William Brown Street includes the Lord Derby Museum and the Mayer Museum. The former contains the zoological, botanical, geological and mineralogical collections, and an aquarium. The Mayer Museum contains the archæological, ethnographical and ceramic collections.

The Derby Museum owed its origin to the thirteenth Earl of Derby, who in 1851 bequeathed to the city his celebrated collection of mammals and birds. These were first exhibited in rooms in a large house in Duke Street (formerly the Union News Rooms), where also was the nucleus of the public library. In 1860 Sir William Brown built the stately edifice which now shelters it, and to the committee appointed by the Corporation three other members were nominated by the donor, one of whom was the Rev. H. Higgins, who gave valuable assistance to the curator, Mr. Moore, greatly improving the arrangements of the museum for educational purposes.

The Mayer Museum owed its origin to the munificence of Joseph Mayer, F.S.A., a Liverpool goldsmith, who in 1867 presented to the town his magnificent collection of Egyptian antiquities, Napoleonic miniatures, pottery and other *objets d'art*. A large square central court in the western wing of the building was set apart for its reception. The museum had become so crowded that extension became imperative if the collections were to be adequately exhibited. Accordingly in 1897 two fine galleries, each 420 feet long, were begun for the housing of the Natural History Collection. They were finished in 1906, and were opened on October 19th of that year by the late Earl of Derby with considerable ceremony.

The arrangement was undertaken by the Curator, Dr. Forbes, and the museum as now constituted undoubtedly is the finest and most complete outside the metropolis. I am much indebted to my son-in-law, Dr. Permewan, who was chairman of the Museum Sub-Committee for some years, for the account of its growth and extension.

The Public Library dates from 1852. In 1850, largely by the influence of William Ewart, a Liverpool merchant, Parliament passed the first Public Libraries Act, which gave power to municipalities to levy a rate for the maintenance of libraries. But before that, namely, in 1849, public attention in Liverpool had been directed to the advisability of establishing a public institution where documents and books could be consulted. In 1850 Councillor (afterwards Sir) James A. Picton carried a resolution in the Town Council: "That a special committee be appointed to consider the practicability of the establishment of a public library in Liverpool freely open to all classes, and to report thereon to this council." This committee having reported in favour of the scheme, public subscriptions were invited, and £1400 was subscribed, together with a gift of 4000 volumes as a beginning. The Corporation thereupon applied to Parliament and obtained "An Act for establishing a Public Library, Museum, and Art Gallery at Liverpool," and Picton was appointed chairman. On October 18th, 1852, the Reference Library was opened in Duke Street with 8926 volumes. The Corporation, however, was slow to provide money for an adequate building, and in 1856 Sir William Brown, after offering the sum of £12,000 to the city towards the expense of such an undertaking, eventually took upon himself the whole cost of its erection. The present magnificent building was the result. The library begun in 1857 was opened on October 18th, 1860. After some years, however, it became evident that more accommodation was required for students, and accordingly the Corporation built a circular reading-room, of noble proportions, which, in gratitude to the labours of Sir

James Picton, was named the "Picton Reading-Room." The progress of the Library has indeed been continuous, and it is justly famed for containing one of the finest local collections in the country. In 1854 the committee paid three hundred pounds to the executors of the estate of Thomas Binns for the extensive collection made by that gentleman of documents, maps, plans, views, portraits, etc., relating to Liverpool in particular and Lancashire generally. This collection has been systematically added to, and in 1907 a very fine special catalogue was published. Numerous branch libraries and reading-rooms have been established in various parts of the city, partly at the cost of Mr. Andrew Carnegie, and there is no town in England better supplied with libraries than Liverpool. The chief librarian is Mr. George T. Shaw.

The Hornby Library was a bequest by Mr. Hugh Frederick Hornby, who left to his native city not only his almost unique collection of rare books, art bindings, engravings and autographs, but £10,000 to erect a suitable building in which to house it. The collection contains about 8000 volumes; a similar number of engravings, many of which are proofs before letters, remarque proofs, proofs on vellum, or in various other states; and several thousand autograph letters by eminent personages. It is an Art library of which the city is justly proud, for the collection of portrait engravings has no rival outside London, excepting perhaps the Hope Collection at Oxford. Its usefulness to the country at large is, however, greatly impaired by the lack of a catalogue, and it is to be hoped that this serious omission will shortly be made good. The Hornby family have indeed been great benefactors to our Public Library. During the last

thirty years of her life, Miss Mary L. Hornby regularly presented books in Braille type for the use of blind readers. By her generosity the library possesses over 2000 volumes in Braille. She must have been amongst the first persons in the country to realise the want of general literature by these afflicted people, and she set herself to meet it. To-day there are several agencies for the supply of these books, but Miss Hornby deserves credit for her generosity and pioneer efforts.

I have already mentioned Sir Edward Russell, the Editor of the *Daily Post*, in connection with the reorganisation of the Liberal Party, and the foundation of the Liverpool Reform Club, but I had many other opportunities of intercourse with him. I had always been an enthusiastic lover of the theatre, and as we had throughout a great number of years witnessed the same performances of all the chief actors and actresses of the day, their various merits often formed the subject of our conversation, and I appreciated his dramatic criticism very highly.

In 1878 I became a member of the Y.Z. Club, attending the meetings regularly until recently, and this was a further bond of union between us, as Russell was already a member.

The Club was first formed at a meeting on January 17th, 1870, at the house of James Allanson Picton, who was the architect of Seaforth Hall, among other buildings, and also the historian of *The Annals of Liverpool*. There were also present on this occasion D. Ginsburg, Hebrew scholar and one of the revisers of the Old Testament; D. Buxton; E. R. Russell; James Samuelson, Editor of the *Quarterly Journal of Science*, and writer of works on

Social Reform and Trade Unionism, and it was decided to form a social and literary club of twelve friends to dine together once a month.

The first dinner of the Club was held at the Alexandra Hotel on February 9th, 1870, when it was agreed to adopt the title "The Y.Z. Club" ("Wise Head"), a witty member remarking that on retirement a member might be designated an "X.Y.Z." The first convener of the Club was the Rev. J. Sephton, who many years later was succeeded by H. E. Rensburg, a stockbroker and a good musician and musical critic. The character of the Club may be gathered from the fact that it has reckoned among its members at different times men engaged in almost every vocation : clergymen, lawyers, medical men, bankers, merchants, brokers and manufacturers, all professing either literary or scientific tastes. Every phase of politics and religion has been represented : Liberals, Conservatives, Liberal-Unionists, Radicals, Churchmen, Nonconformists, Roman Catholics, Hebrews, Unitarians, have all met in friendly intercourse and they have freely debated social and religious questions without acrimony and without the slightest breach of friendship. One of the causes, perhaps the chief cause, of the prolonged existence of the Club has been the perfect good humour with which every member has received the badinage of his fellow-members, even when directed against his pet foibles and personal traits. The proceedings of the Club commenced with an early dinner at 5.30, at which the allowance of wine was restricted, and none was drunk after dinner, when coffee and cigars were served ; the members giving themselves up to discussion, often lively and animated, on each topic introduced.

The visitors to the Club were frequently eminent men, amongst whom were Professor Huxley ; H. E. Roscoe ; the late Earl of Derby ; Professor Rolleston ; Max Bruch, the conductor of the Philharmonic Society's concerts ; J. L. Toole ; Lionel Brough ; Mrs. Crawford, correspondent of the *Daily News*, and other journalists, together with Continental and Transatlantic savants.

The latest literary and artistic movement in Liverpool was the foundation of the Repertory Theatre. This was initiated by Prof. C. H. Reilly, Head of the Liverpool University School of Architecture, to which he had been so successful in attracting students that it became necessary to find larger accommodation for them. Mr. (now Sir) W. H. Lever purchased the Bluecoat School building (now known as Liberty Buildings) for that purpose, and the School of Architecture and the Sandon Studios now occupy these premises.

In 1910 the Playgoers' Society was formed (the members' subscription being 2s. 6d.) with the object of stimulating interest in the drama and opera by means of lectures and debates and to increase and organise audiences for worthy productions. The members during the first year numbered six hundred and fifty-four, and the success of this effort led to a movement towards the formation of a Liverpool Repertory theatre, in which venture Prof. Reilly was assisted by Messrs. Frank Turton and Oscar Waddington, two Liverpool citizens with an unbounded enthusiasm for the theatre. These two enthusiasts gave great impetus to the movement by starting a correspondence on the subject in the two Liverpool daily newspapers, the *Daily Post* and the *Courier*, the

editor of the latter then being Mr. Robert Hield, who also rendered valuable assistance to the movement.

Without the help of these Professor Reilly is of opinion that the successful growth of the repertory idea would have been inevitably delayed. As it was the movement advanced with great rapidity, and a guarantee fund of £2000 was raised through the joint efforts of Sir Edward Russell, Professor Reilly, and last but not least Mr. Ronald Jeans, a young playgoer, son of A. G. Jeans of the *Daily Post*, who has been one of the most earnest workers in the repertory cause. The first performance under this movement took place at Kelly's Theatre, where the curtain rose on "Strife," by Galsworthy, the play chosen for the initial performance, which proved an unbounded success. "Strife" was followed by "Nan," "Cupid and the Styx," etc.

The artistic and financial success of this experimental repertory season soon inspired the resolve to provide a permanent theatre where the best plays by a resident company of actors would be staged, and a public limited liability company was formed, the profits being limited to six per cent. The Star Theatre was acquired and specially constructed to suit repertory needs by that scholarly architect Mr. Adshead, professor of Civic Design at Liverpool University, and it is now one of the most beautiful and comfortable theatres in the country.

The first performance in the new theatre, when the play chosen was "The Admirable Crichton," by J. M. Barrie, took place on Saturday, November 11th, 1911, when Miss Aida Jenoure recited a prologue written for the occasion by John Masefield.

Among the directors of the company were Professor

C. H. Reilly, M.A., chairman ; J. J. Shute, Junior, vice-chairman ; Sir Edward Russell ; Robert Hield ; Ronald Jeans ; Professor Ramsay Muir, M.A. ; my son Clifford Muspratt ; George Rathbone ; and A. E. Rea. For the first two seasons the theatre was well attended, but the plays chosen were in some respects too similar in character, and those of a more varied type were introduced : Galsworthy, Bernard Shaw, J. M. Barrie, Alfred Sutro and Arnold Bennett always draw appreciative audiences. Plays written by Lancashire men are always popular, including those of Lascelles Abercrombie and Ronald Jeans, each fresh play from whose talented pen has been enthusiastically received.

Owing to the expenses of the performance the receipts were only just sufficient to meet expenditure, and if the company were to continue more capital would have been required. When war broke out in 1914 this was obviously hopeless, at any rate for a time, and while other theatres were forced to reduce the salaries of the actors the repertory artistes, at the instigation of Miss Madge Mackintosh and Miss Estelle Winwood, agreed to form a Commonwealth Company to carry on for the period of the war. They received the cordial assistance of Mr. Lawrence Hanray and the rest of the company, and owing to their efforts it proved a great success.

It has always been a moot point whether a repertory movement could endure, and some of its originators might perhaps be said to have aimed too high, but the movement itself has had most beneficial results by raising the standard of acting in other theatres, and the continued playing together on the repertory system and the changing about of parts and styles have pro-

duced an all-round technique, a combination and ensemble that have not been attained by older companies working on ordinary methods giving for commercial reasons one play for an indefinite period with a "star" occupying the centre of the stage.

As the Commonwealth Company consists of the actors trained under the repertoire system they have continued their work on the same lines, and those who have attended their performances regularly mark with appreciative interest the constant growing improvement in the acting of its various members.

It is to be regretted that Miss Madge Mackintosh and Miss Estelle Winwood are leaving Liverpool, but Mr. Lawrence Hanray, who besides being a talented actor of great versatility has written plays and also composed the music for Mr. Ronald Jeans' revues, remains with us, as well as Mr. Shine, an old favourite; Mr. Harvey Adams; Mr. Percy Marmont; Miss Edith Smith; Miss Eileen Thorndike; Miss Nina Henderson; and Miss Edith Barwell, who have nearly all been with the company since its formation.

CHAPTER XXI

I HAVE already referred to a debate in the Liverpool City Council, in 1878, on the application of Owen's College, Manchester, to be granted the right of conferring degrees, which resulted in the formation of the Victoria University, of which Liverpool College formed a constituent part, and I then said I would treat the question at greater length subsequently. Before describing the steps taken for the foundation of University College, it may be useful to refer generally to the position of education in the city prior to 1878.

Under the Education Act of 1870 a School Board was formed with Mr. Christopher Bushel as Chairman, and Mr. Samuel Rathbone, Mr. Oulton, and others were members. The School Board dealt with elementary education, and secondary education was only represented by the Institute founded on undenominational lines, and by the Collegiate Institution in connection with the Church of England. There was also a school in connection with the Royal Institution founded by William Roscoe in 1814, which provided good secondary education for a good number of pupils. There were, of course, numerous private boarding schools, but taken as a whole Liverpool was very backward as regards secondary education. There were, however, a large number of gentlemen who were keen educationalists, and many efforts were made to extend and improve the teaching of science.

In the year 1848 my brother, Dr. Sheridan Muspratt, founded the Liverpool College of Chemistry, on the same lines as the Royal College of Chemistry in London, giving opportunities for the practical teaching of that science in a small laboratory, at first over a stable behind his residence in Canning Street, and subsequently in Duke Street. In this College a good chemical education was given, and several of the students obtained positions in works and mines both in this country and in the colonies.

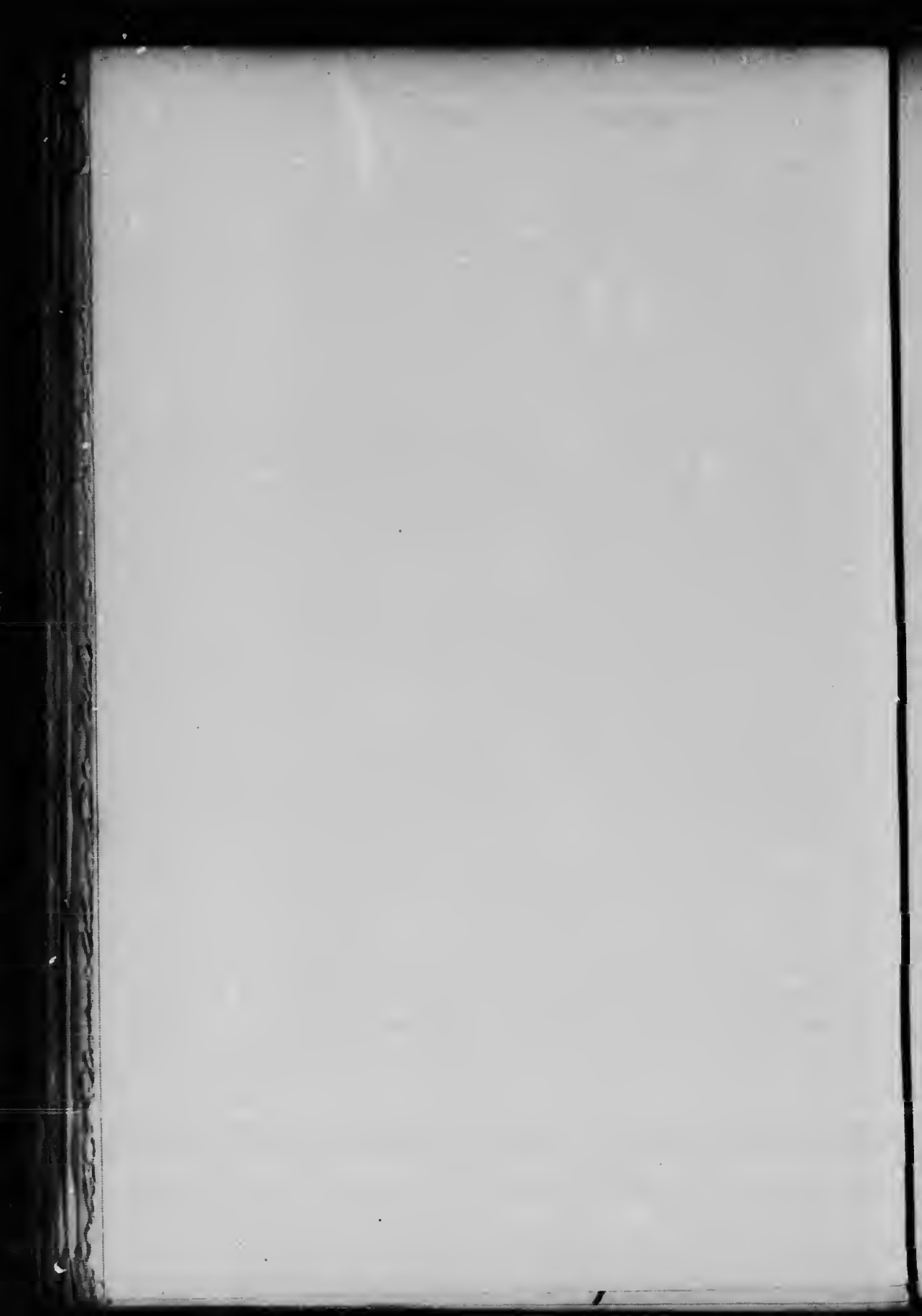
The directors of the Institute also founded Queen's College, with the object of giving a liberal education both in Arts and Science, and in training the students for the London University degrees. Queen's College may be said to be the precursor of the Liverpool University, but as the attendance was very small, after about fourteen years the Institution had to be closed as it had no endowments to fall back upon. Owen's College in Manchester, founded about the same time, was more fortunate as it had received a handsome endowment by Mr. Owen of £100,000.

The next move was made in another direction. In connection with the Science and Art Department of the Committee of Council on Education, attention was drawn to the great need of technical education for the working classes, which led to the establishment in 1861 of the School of Science in this city, it being amongst the earliest institutions of this kind in connection with South Kensington.

The prejudice at that time existing against Trade Unions led Mr. James Samuelson, who was an active member of the School of Science, to start a special set of classes for their benefit, entitled the Science and Art



JAMES SHERIDAN MUSPRATT
FOUNDER OF THE LIVERPOOL COLLEGE OF CHEMISTRY



Classes, which soon became a recognised institution, of which I, with the late Canon Major Lester and other well-known citizens, formed a Committee. The success of these classes was very great, owing to the services of the late Mr. Norman Tate, F.C.S., who was for many years the Principal. Mr. Tate was a pupil of Dr. Sheridan Muspratt at his college in Duke Street, and carried on business as an analytical chemist, and some of the classes which were held in the evenings were accommodated in his laboratory.

Mr. Samuel Rathbone, who was the second Chairman of the Liverpool School Board, after consultation with Colonel Donnelly and Major Festing, suggested the desirability of extending scientific instruction into Board Schools, and was assisted by Mr. Norman Tate, who supervised the erection of makeshift laboratories in the Board Schools to enable practical instruction in chemistry to be given. After the passing of the Local Taxation Act in 1890 all these schools were absorbed by the Technical Education Committee of the City Council.

In the Royal Institution the School of Medicine found a home, but in 1844 it was removed to the Royal Infirmary, where it extended its scientific teaching both in chemistry and physiology and anatomy. The school, however, suffered, like Queen's College, from the absence of endowments, and it was necessary, in some form or other, to obtain assistance from the public. At the same time many friends of higher education formed an association for its promotion in Liverpool, and held several meetings in 1877 and 1878 together with the School of Medicine. At one of the meetings Mr. Charles Beard took the chair, when it was resolved that—"It is desirable that a College should be established in Liverpool to provide such in-

struction in all branches of a liberal education as will enable residents in the town and neighbourhood to qualify for degrees in Science and Arts, and at the same time to give such technical instruction in Physics, Engineering, Navigation, Chemistry, and allied subjects as would be of immediate service in professional and commercial life."

While the committee were considering the form of this appeal Sir William Thompson, afterwards Lord Kelvin, at a private dinner, spoke so enthusiastically and strongly on the subject that Mr. William Rathbone entered into the movement, and his zeal and energy combined was one of the chief factors in bringing about, at a later period, the foundation of University College. He headed a deputation to the Mayor, asking for a town's meeting to be called to consider how to take the first steps for the establishment of a College of a University character. This meeting was convened on May 24th, 1878, and a Committee was formed to give practical effect to the movement and to draw up a scheme for the establishment of the proposed College.

All who had the interests of higher education at heart were convinced that a great change in our educational system was required, and that a local teaching University had become a necessity. This was already seen by the Royal Infirmary School of Medicine, which had at first thought an amalgamation with Queen's College might be sufficient, but owing to difficulties encountered, financial and others, it was finally determined to make a special appeal to the public for funds to endow a College for higher education.

This led to a meeting in the Town Hall on May 24th,

1878, when the resolution before mentioned, was passed with the addition of the following words: "*And other subjects at any of the Universities granting degrees to non-resident students.*"

A sub-committee was formed, with Dr. Campbell Brown, Professor of Chemistry in the Liverpool School of Medicine, and Mr. Stewart, a barrister, as Honorary Secretaries, and on November 7th they laid before the adjourned town's meeting a careful report proposing that the title adopted for the new institution should be University College, Liverpool, recommending as the minimum necessary the establishment of seven professorships together with two lectureships at the estimated cost of £75,000, independently of what might be required for purchase of site and buildings.

At first the response was not very encouraging, but after an address by Canon Lightfoot, and the zeal and persuasive power of Mr. William Rathbone, the required sum was promised, and with the assistance of the city a site was acquired immediately adjoining the Royal Infirmary, with a building previously occupied as a lunatic asylum. At this stage, seeing that the public were sufficiently interested to make the establishment of such a college a success, I joined the committee and heartily co-operated with the movement.

The question of the constitution and incorporation of the College was successfully solved and the terms of the charter agreed upon and submitted together with a draft charter to Her Majesty and Her Privy Council. The University College, Liverpool, received its Charter of Incorporation on October 18th, 1881.

The charter was drawn up on most liberal lines in

accordance with modern ideas by Mr. William Rathbone, Mr. Christopher Bushel and the Rev. Charles Beard. Both Mr. Rathbone and Mr. Beard had been students in Germany and were familiar with the working of the German Universities. Female students were to be admitted without distinction to all the privileges of the College, and it was a fundamental condition of the constitution of the College that no student, professor, or teacher, or other officer or person connected with the College should be required to make any declaration as to his religious opinions, or submit to any tests whatsoever thereof, and that no gift or endowment for theological or religious purposes, or having any theological condition attached thereto, should be accepted on behalf of the College. To the Senate was given full powers over the courses of instruction and the syllabus, and to the Council all questions involving matters of finance and the general management of the College.

The first President was Lord Derby, the two Vice-Presidents Mr. William Rathbone and Mr. Christopher Bushel, and the Treasurer Mr. Robert Gladstone. Among the members elected on the first Council were Mr. Edward Lawrence; Mr. Samuel Rathbone, Chairman of the School Board; the Rev. George Butler, and the Rev. Charles Beard.

In accordance with the charter, the post of Principal was filled by Mr. Rendall, M.A., Fellow, Lecturer and Assistant Tutor of Trinity College, Cambridge, to whom was assigned the Chair of Classics and Ancient History. Six other Chairs were established, appointments being made in due course, of Professor John McCunn to the Chair of Philosophy and Political Economy; Oliver

Lodge to that of Mathematics and Experimental Physics ; W. Martin Conway to the Roscoe Chair of Art ; Andrew Cecil Bradley to English Literature and Language ; W. A. Herdman to Natural History ; Dr. Campbell Brown to Chemistry.

It will be noticed that although the general tendency of the modern University Colleges was to favour Science at the expense of Arts, among the first professors and lecturers appointed to the Liverpool College those of the Arts and Science sides were fairly evenly divided, otherwise the University might have drifted into a merely technical institute.

As early as 1882 it was found desirable to separate the Chair of Mathematics from that of Physics. So long as the University College remained unconnected with the new Victoria University, the professors were obliged to train the students for examination, but felt the weakness of being unable to examine or confer degrees upon its own students, for whom London University provided the sole possible access to a University degree. In order to comply with the conditions for entrance as a constituent College of Victoria University it was found necessary to make an appeal to the public for more funds, and the movement was strongly supported by the Infirmary School of Medicine, as the privileges granted to Manchester of conferring Medical degrees would react disastrously, if not fatally, on the Medical School of Liverpool.

It was clear that this could only be obtained by the admission of the Medical School as part and parcel of University College into full membership in Victoria University, and in the year 1884 a third town's meeting was held, which resulted in funds being found for the

endowment of two additional Professorships, Latin and History, and for the establishment of new Lectureships and the extension of the buildings.

Finally in 1884 University College was admitted as a College of the Victoria University, side by side with Owen's College, Manchester, and the Medical School became the Medical Faculty of University College with six representatives on the College Senate. A Chair of History was founded, and filled by Donald Mackay as first professor. The close of the year 1884 was marked by the institution of a Professorship of Engineering, filled by the appointment of Professor Hele Shaw, of Bristol College.

University College at first laboured under great difficulties as it was really supported in spirit by a comparatively small number of the citizens of Liverpool, and as there was no Matriculation Examination it was necessary for the professors to do the work which should have been done in a secondary school. Students in the College were received at the age of fifteen, and very soon the principals of secondary schools, instead of supporting, complained of the rivalry of the College. The professors, however, soon began to earn the respect of the inhabitants of Liverpool and the district surrounding by holding courses of evening lectures and coming into contact with many influential citizens.

At first, as there were very few students, many of the day classes were attended solely by young ladies of good family and education. Some of the classes were very small, the professor with first-rate qualifications having to be contented with an audience of only two! The site of the University was also a subject for ridicule as it was generally known as the lunatic asylum.

In spite of these obstacles the ability of the professors gradually overcame all difficulties and in a few years great progress was made both in the number of students and in the increase of endowments. This showed the wisdom of the first promoters of the institution, who preferred that the money for first endowments should be spent on the teaching staff in preference to the buildings. The Rev. Charles Beard, in particular, had lofty conceptions of what a University ought to be—as an institution not only for teaching what was already known, but for extending the boundaries of knowledge by original research, and the first professors to a large extent shared his views.

As the number of students increased, and the Government rendered pecuniary assistance to University College, advances were made in new directions. Professor Herdman, who held the Chair of Natural History, instituted a laboratory for Marine Biology, first on a small scale at Hilbre and Puffin Island, and later a very complete one in the Isle of Man, and the annual reports of the numerous biologists and students contained information for all interested in Marine Biology. Professor Herdman was also employed by the Government to report on the Pearl Fisheries in Ceylon, which resulted in steps being taken to improve that industry, with marked financial success.

The Engineering side of the College was soon accommodated in a building supplied by Sir Andrew B. Walker in commemoration of the Jubilee of Queen Victoria, the Chair being fully endowed by Mr. Thomas Harrison. At the same time a new Chair was founded, under the title of Electrotechnics, subsequently changed to that of Applied Electricity.

Dr. Oliver Lodge, who was at first appointed to teach Mathematics and Experimental Physics, was soon relieved for his proper work by the appointment of Professor Frank Stanton Carey to the Chair of Mathematics. Professor Lodge's wonderful ability as a lecturer soon made him popular in Liverpool and the neighbourhood, and his original investigations in Physics and Electricity placed him amongst the foremost scientific men in England. He was at first accommodated with rooms in part of the old lunatic asylum, fairly equipped with the necessary apparatus, but as the number of students increased it was found necessary to erect a building to be devoted solely to the teaching of Physics, towards which funds were promised by various friends of the College.

On the Arts side equal progress was made. About the year 1884 the Faculty of Arts was constituted. The Roscoe Chair of Fine Arts had been merged into a City School of Architecture and Applied Art, and the lecturer on Education became the head of a University Training College.

The Chair of Logic and Philosophy was strengthened by the appointment of Professor Gonner to the Chair of Political Economy. Kuno Meyer was appointed Professor of Teutonic languages, but he also undertook the teaching of the Celtic languages, including Welsh, Gaelic, and Erse. A Chair of French was also founded by Mrs. Barrow, and a Lectureship in Italian Literature instituted.

The original Chair of English Language and Literature was divided by the appointment of Dr. Pribsch to a Lectureship on the English Language and Philology, and subsequently in 1900 a Chair was founded, under the

title of the Baines Chair, from funds supplied by Mr. Talbot Baines, executor of his brother Frederick, sons of the late Mr. Thomas Baines, former editor of the *Liverpool Times* and author of a History of Liverpool.

The first Chair of Literature was held by Professor Bradley, who has since been distinguished by his original work on Shakespearian and other literature. He was soon called to fill a similar Chair in Glasgow, and afterwards in Oxford. He was succeeded by Professor Raleigh, whose essays on Milton, Johnson, and other authors have placed him among the most eminent of our literary critics. followed Professor Bradley at Glasgow and afterwards Oxford, and was succeeded by Professor Elton, who is fortunately still with us, and is well known by several works, particularly his *Survey of English Literature, 50 years, from 1780 to 1830*. He has also rendered great service in the movement to found a separate self-governing University in Liverpool.

When University College joined the Victoria University in 1884 and the Infirmary School of Medicine became a Faculty of the College the six professors formed part of the Senate. Among these Sir William Banks was Professor of Anatomy, but he resigned in 1894, being succeeded by Professor Paterson, and an anatomical laboratory was built adjoining the Thompson Yates Laboratories by funds supplied by Mr. George Holt. Dr. Caton, Professor of Physiology, resigned in 1891 and Professor Gotch succeeded, who resigned in 1895 on his appointment to the Chair of Physiology at Oxford. His successor was Professor Sherrington, one of the most eminent physiologists in England. He remained in Liverpool till 1913, when, on the death of Professor Gotch, he was called to Oxford.

In 1894, on the resignation of Professor Barron, Professor Boyce (later Sir Rubert) was appointed to the Chair of Pathology, and his ability and energy were of the greatest service to the College. He did much work for the city in bacteriological investigation and in the improvement of sanitary science, culminating in the appointment of Dr. Hope, the Medical Officer of Health for the city, as Professor of Hygiene. He also founded the School of Tropical Medicine, which was later strengthened by the appointment of Major Ronald Ross as lecturer.

A special laboratory was founded by the munificence of Mr. George Holt at the corner of Ashton Street for bacteriological and pathological investigation, and the Tropical School of Medicine became known all over the world for its investigations into tropical diseases, and was supported by Sir Alfred Jones, whose ships traded with tropical West Africa, where malaria, yellow fever, and other diseases were rampant. This work could not have been properly done without the adequate laboratory accommodation afforded by the College.

Professor Campbell Brown, who was appointed to the Chair of Chemistry, had for a short time to be content with inadequate accommodation provided by the old Infirmary School of Medicine. But when a special appeal was made for the purpose of providing a new laboratory a fine building was erected, which provided for an extension when required by an increase of students. The first portion of the building was subscribed for by the citizens of Liverpool and erected on a site in Brownlow Street, and the extension was carried out in 1894 with funds supplied by Mr. F. H. Gossage and Mr. T. S. Timmis, bearing the name of the Gossage Laboratory. The

architect was Mr. Waterhouse, afterwards employed in the designing of the Victoria Building, the Engineering, Thomson Yates, and Anatomical Laboratories.

Dr. Campbell Brown had done great service in support of the movement for Higher Education in Liverpool, and was employed by the City Corporation as City Analyst to report on the purity of the water supply and to examine into the adulteration of food.

A Chair which had been founded by funds supplied principally by the lawyers of Liverpool, called the Queen Victoria Chair, was at first filled by Professor Jenks, who on his call to Oxford to the Readership of English Law, was succeeded by Professor Emmott, of Trinity Hall, Cambridge, and of the Johns Hopkins University.

The progress made up to 1897 in the number of endowed Chairs and suitable accommodation for the various laboratories and the library was so great that the report of a special Commission, appointed by the Chancellor of the Exchequer to visit the University Colleges receiving grants in aid from public funds, being so satisfactory, the Government grant of £1500 was increased to £3000 a year.

The time had now come for further advance.

In 1898 Principal Rendall resigned on his appointment to the Headmastership of Charterhouse School, having done excellent work in the earliest years of University College. His successor, Dr. Glazebrook, only held the post for a short time owing to his appointment in 1899 as Director of the National Physical Laboratory and Professor A. W. W. (now Sir Alfred) Dale succeeded him.

The compromise which had been arrived at, resulting

in the foundation of Victoria University, was at first of great advantage to University College, which at that time would have found it difficult to attain the standard of University rank if isolated and alone. But in course of time many disadvantages became apparent. The seat of the University being in Manchester, and all meetings being held there, practically excluded the non-academic laymen of the Council from any active part in University affairs.

Even the academic members of the Council found increasing difficulty in having to attend meetings in Manchester. Owing to the increase of their work in Liverpool, which, together with teaching, original research, and administration, developed as their responsibilities branched out, the professors practically had to do the work of a University in Liverpool, leaving little time for the business of another elsewhere. Under these disadvantages the federal system was only slightly better than before, when University College had to prepare its students for the London examinations, which entirely divorced teaching and examination. It did not meet the desires of the founders of University College and the friends of Higher Education in Liverpool for a self-governing University with full powers for laying down the curriculum and course of study necessary for a degree. When Victoria University was founded most of the members of the Imperial Government, if they had received a University education at all, had been to the older Universities, and were under the impression that no true University education could exist except on their model, although in many respects the older Universities were inferior to those of Germany, Scotland, Switzerland,

and some of the newer Universities of the United States.

Many of the public, even in Liverpool, shared this opinion, and thought that the multiplication of Universities would lower the standard for a degree, and there was very great difficulty in obtaining adequate pecuniary support from the Government and the city. Fortunately one member of the Government, Mr. Chamberlain, was more alive to modern requirements, and was strong enough, about the year 1900, to obtain a charter for a University in Birmingham.

In Liverpool itself some of the professors of University College were satisfied with things as they were, and considered only the working of their own departments, not the good of the College as a whole. Many of the public were also indifferent, and at the instigation of Professor Mackay and his enthusiasm for the foundation of a self-governing University and energy in supporting the movement, a number of meetings were held, principally in University Club, to which all friends of Education were invited, in order to point out the great advantage to be gained from a self-governing University in the city. On July 3rd, 1901, the City Council, representing the public, passed the following resolution: "That this Council has observed with much satisfaction the growth and progress of University College, and in view of the fact that the College authorities are taking steps to procure the establishment of a separate University for Liverpool, records its opinion that it is desirable in the interests of higher education in the City that such a University should be founded."

A fresh appeal was now made to the citizens of Liver-

pool, and a large sum of money, about £150,000 or £180,000, was subscribed, which enabled the University College to largely increase the number of endowed Chairs and laboratories, which strengthened the case to be placed before the Privy Council for separation from Victoria University. Evidence in support of the claim was given before the Privy Council by Mr. (now Lord) Haldane and Principal Dale, in June, 1902; Professor Dale showing the growth of University College and the extra work entailed on the professors, who were doing University work twice over, in Liverpool and Manchester, also that the population was sufficiently large for an independent University.

On July 15th, 1903, a charter was granted establishing an independent University in Liverpool, and since then University College has been separated from Victoria University by an Act of Parliament. Following the recommendation of the Privy Council provisions were made to secure that a common Matriculation examination should be conducted by a joint Board of Universities, with three years' study as a qualification for a degree, but that after 1906 the three years should be subsequent to passing the Matriculation Examination.

The large sum of £180,000 enabled University College to set aside £20,000 for the Victoria Building, to house the Faculty of Arts, for the endowment of the Chair of German, the Chair of Electrotechnics, for the foundation of the Chair of Commercial Law, for the appointment of several lectureships in the Faculty of Engineering, and increased assistance in the Chemical department, including the endowment of the Chair of Bio-Chemistry,

principally for original research, also for the support and extension of the Institute of Archæology.

New laboratories for Natural History and Electro-technics were erected, and the Johnston laboratories providing for the accommodation of Bio-Chemistry under Professor Benjamin Moore, of Tropical Medicine under Professor Ronald Ross, and of the department of Experimental Medicine, with £10,000 specially for Cancer research.

Thus, after twenty-two years, University College from small beginnings has grown in a way that its most hopeful pioneers could never have foreseen. In accordance with the charter of the new University the following appointments were made: Chancellor, Lord Derby; Pro-Chancellors, Sir Edward Lawrence and E. K. Muspratt; Vice-Chancellor, Alfred Dale, M.A.; Treasurer, Hugh Rathbone, M.A.

One of the first things to be done was the rearrange ment of finances, adapting the organisation according to the new conditions and requirements of the University, including the merging of the finance of the Medical Faculty with that of the University. A skilled accountant was appointed and the staff enlarged. There were now twenty-nine professors on the Senate, and the students having increased in numbers, raised the fees from students from £14,222 to £22,875, which, with increased grants from the Government and the City Borough Council and the public, brought up the total income from £53,162 to £85,882.

At the first meeting of the Council in 1903 I was elected President, becoming an ex-officio Pro-Chancellor for three years, extending if re-elected to another three years.

In 1907 the University conferred upon me the honorary degree of LL.D., and after the Graduation Ceremony in St. George's Hall the members of University Club and others interested in the University entertained me at a luncheon, presided over by Mr. C. W. Jones, President of the club and a chief supporter of the University, to present me with my portrait in oils. The portrait was painted by Mr. Augustus John, at that time connected with the University, and since recognised as one of the most eminent English artists of the day. The presentation was made by Sir William Ramsay, and after I had acknowledged the nonour done to me I presented it to the club, where it now hangs.

Under the new conditions the University advanced rapidly. Three new Chairs were provided: Architecture, under Professor Reilly; Physical Chemistry, under Professor Donnan; and the Baines Chair of English Language under Professor Cecil Wylde. The Chair for Physical Chemistry was provided out of funds given by Sir John Brunner, and I built a separate laboratory, adjoining the existing Chemical laboratories, fully equipped with all the necessary electrical apparatus, with lecture rooms and a number of separate rooms for original research. The first occupant of the Chair was Professor F. O. Donnan, who had already distinguished himself, especially by his work in Physical Chemistry, carried out partly in Germany when he was a student under Professor Ostwald.

Much work was now done in original research both in the Faculties of Science and Medicine and in that of Arts. The position of professors and lecturers was improved and a superannuation fund at the age of sixty-five was established. The stipend of professors was increased by



E. K. MUSPRATT AS PRO-CHANCELLOR OF LIVERPOOL UNIVERSITY
From a photograph by Medrington, Liverpool

an endowment of £500 a year, with the addition of one-third of the fees and a guarantee of a minimum of £600 a year or not more than £1000.

A School of Veterinary Medicine was also established in connection with the University, and the School was affiliated to the Royal College of Veterinary Surgeons, the only body empowered to confer a professional qualification, and a Chair of Veterinary Medicine and Surgery has since been established. This was quite a new departure, for a School of Veterinary Medicine to be connected with a University, although Veterinary Medicine should stand on the same footing as ordinary medicine. But unfortunately we did not receive the necessary encouragement from the Government and we had to depend upon annual subscriptions from shipowners and others. At the present time of war this neglect of the Government is specially to be regretted.

Upon application to the Council the Board of Education consented to increase the Day Training College for teachers by ten men and twenty women. A new Clinical School was established, uniting with it the Royal Southern Hospital, the David Lewis Northern Hospital, the Stanley Hospital, and others, providing instruction and supervision under the control of the Medical Faculty. The Library has continually increased by donations from Mr. Thompson Yates, Mr. Hughes, and others, also class libraries have been established in all the Faculties.

The work of the University continued to increase in various directions. The School of Architecture obtained new accommodation in Liberty Buildings provided by Sir William Lever, and Mr. Reilly, who succeeded Pro-

fessor Simpson as Professor of Architecture, infused fresh energy into the department.

The School of Tropical Medicine was deprived by death of its most energetic founder, Professor Boyce, but with the pecuniary assistance of Sir William Lever it has not relaxed its beneficial work. Professor Sir Ronald Ross, who in the year 1904 visited Panama to inspect and report on the anti-malarial method adopted in the isthmus and rigorously carried out by the United States Government, has contributed very greatly to the completion of this great undertaking, as the district itself has been freed from the scourge of malaria.

New Chairs of the Philosophy and History of Mathematics, Regional Surgery, Tropical Medicine, and Parasitology were also established. The School of History was divided into three sections, Ancient, Mediæval, and Modern, with separate Honours Schools. Professor Ramsay Muir, on his appointment to the Chair of Modern History in Manchester, was succeeded by Professor Webster, and Professor Halliday was appointed to that of Ancient History in succession to Professor Mackay.

In 1909 I retired from the Presidency of the Council and the Pro-Chancellorship, as according to statute I could not be re-elected for a further term. Since then I have continued to be an active member of the Council, and on the eightieth anniversary of my birthday, November 6th, 1913, I received a deputation from twenty-four professors and lecturers of the University, who presented an address in the following terms :—

To Edmund Knowles Muspratt, LL.D., First President of the Council of the University of Liverpool and a Pro-Chancellor of the University.

One of the Founders and Councillors of University College, Liverpool.

On the celebration of your Eightieth Birthday we send you our congratulations and warm wishes.

We represent more than one generation of teachers. We and those who will succeed us must always hold your name in regard and honour as that of one of the true makers of our University.

Your training in Science, received under eminent auspices at Munich and Giessen, has inspired you with a conception, rare in England, of learning in general, and of its ideals and methods. This conception you have ever been ready to realise when helping to mould a modern University; and your sympathy with humane studies of all kinds has always been signal and effectual.

Not only as a generous founder, and as an inspirer of other benefactors, but by advice, by speech, and by vote you have steadily aided us in performing one of the most urgent of our duties—the choice of the right men, animated by the highest standard of scholarship, to be our colleagues.

Your skill, tenacity, and courage in opposing, with or without hope, all narrow and destructive policy, by whomsoever urged, has given us heart on countless occasions.

You have ever stood for the better self of this University, so often obscured by shortsighted fears and by obsolete notions.

No one here, therefore, has promoted the cause of learning and academic statesmanship longer, more wisely, or with a more single mind.

We send you these lines that you and your family may

know how we appreciate such service as yours, and the place that you hold in our affections.

(Signed)

J. M. MACKAY.
 GEORGE EMMOTT.
 RUSHTON PARKER.
 OLIVER ELTON.
 HENRY CECIL WYLDE.
 JAS. FITZMAURICE KELLY.
 ROBERT H. CASE.
 JOHN GARSTANG.
 J. A. TWEMLOW.
 C. H. REILLY.
 ROBERT BOSANQUET.
 E. C. C. BALY.

C. F. LEHMANN-HAUPT.
 C. S. SHERINGTON.
 W. THELWALL THOMAS.
 W. J. SPARROW.
 W. C. McLEWIS.
 ALEXANDER MAIR.
 PERCY E. NEWBERRY.
 ROBT. PETSCH.
 JOHN SAMPSON.
 BERNARD PARES.
 A. P. THOMAS.
 S. D. ADSHEAD.

Professor Donnan, having left Liverpool to succeed Professor Ramsay in the London University, was not able to form part of the deputation, but wrote as follows :—

November 7th, 1913.

MY DEAR MR. MUSPRATT,

I have just heard how some of your many friends in Liverpool have endeavoured to express, on the occasion of your eightieth birthday, their admiration and affection for you.

I am very sorry that they did not give me an opportunity of signing also, but perhaps you might allow me to do that later.

I am writing to tell you how sincerely I desire to add my heartiest congratulations and good wishes on the occasion of your birthday.

It delights my heart to think of you in good health and spirits. Such a thought makes us all rejoice.

I could never repay the debt which I owe you per-

sonally. But the remembrance of yourself, your friendship, and your constant advice, guidance, and truest hospitality is ever in my mind and will ever remain green in my heart.

What you did for Chemical Science at Liverpool University the world already knows.

And the splendid laboratory which you built, equipped, and endowed there will continue for generations to advance the cause of Chemical Science, and may I add, to add lustre to the honourable name which it bears.

But it is not for the sake of the laboratory that I write this letter. I just want to tell you, as one of your many friends, what a warm and deep affection I feel for yourself; and how earnestly I want to thank you for the unnumbered kindnesses which you have showered upon me.

Ever your sincere friend,

F. O. DONNAN.

I also received a letter from the Vice-Chancellor as follows:—

November 5th, 1913.

DEAR MR. MUSPRATT,

The Senate have asked me to express to you their affectionate congratulations on the occasion of your eightieth birthday.

It is a pleasant task, but not an easy one. For it is impossible to put into words all the gratitude that we feel for all that you have done for us, and for all that you have been to us.

No one can look back upon a longer record of personal service.

You were one of the pioneers in the early days of the movement for University Education in Liverpool.

And from first to last your faith, your courage, and your enthusiasm have been consistent and contagious.

No one among those who have been associated with the College and the University has taken a wider outlook, or has shown a more catholic sympathy.

You have never restricted yourself to the subjects in which you had special reason to be interested: there is no part of our work that you have not helped to develop, and in which your influence has not been felt.

Your benefactions, generous as they have been, represent only a part of what you have given us. Time, thought, strength, you have never withheld. The best and greatest of your gifts has been yourself.

And what can I say of your personal relations to the members of our staff? Of your counsel, your encouragement, your sympathy, of all that comes from the heart and that goes to the heart? These are not forgotten by those who are still enriched and strengthened by them to-day: they are among the memories that abide.

The best that we can wish for you is that you may still have strength to carry on the work that you love; and that as the years pass you may see growth, development, and success; and that you may always have the pride and pleasure that come from the ensured triumph of a daring enterprise.

Believe me to remain,

Very truly yours,

ALFRED DALE,

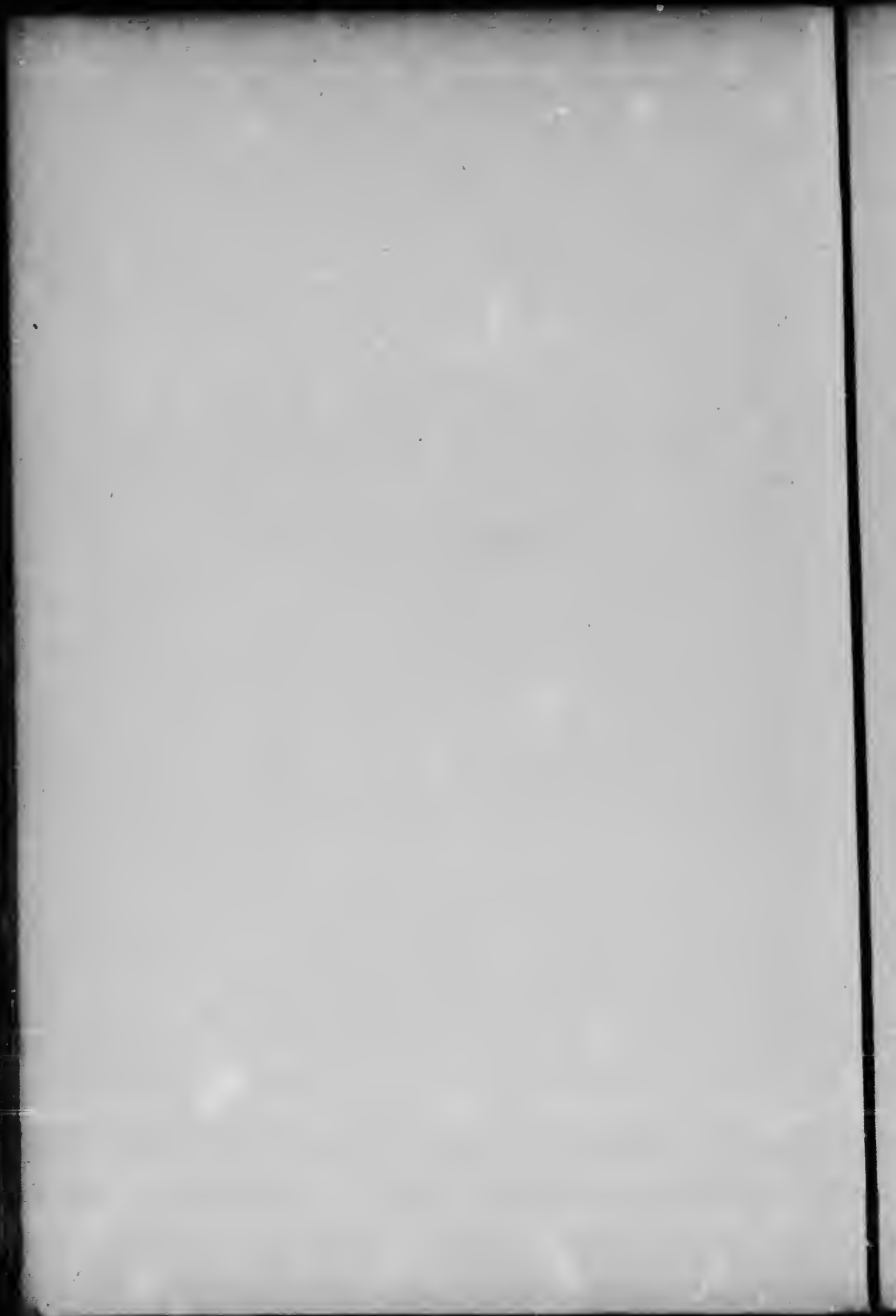
Vice-Chancellor.

With the outbreak of war, August, 1914, the progress of the University is temporarily arrested owing to a large number of the staff enlisting for military service and the foreign professors being called away to serve their countries. The number of students registered in October, 1915, is much smaller than usual, and the fees

received from students are reduced by about £6000 per annum. The total reduction on estimates being at least £7000 per annum.

Under these circumstances the University carries on its work under difficulties, as owing to the enormous contributions to various war funds, the endowment of new Chairs and increase of number of lecturers will be necessarily curtailed. At the termination of the war it may be confidently expected that the University will resume its work with increased activity owing to the general recognition by the Government and the country of the value of the highest scientific education which is afforded by the modern Universities.

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