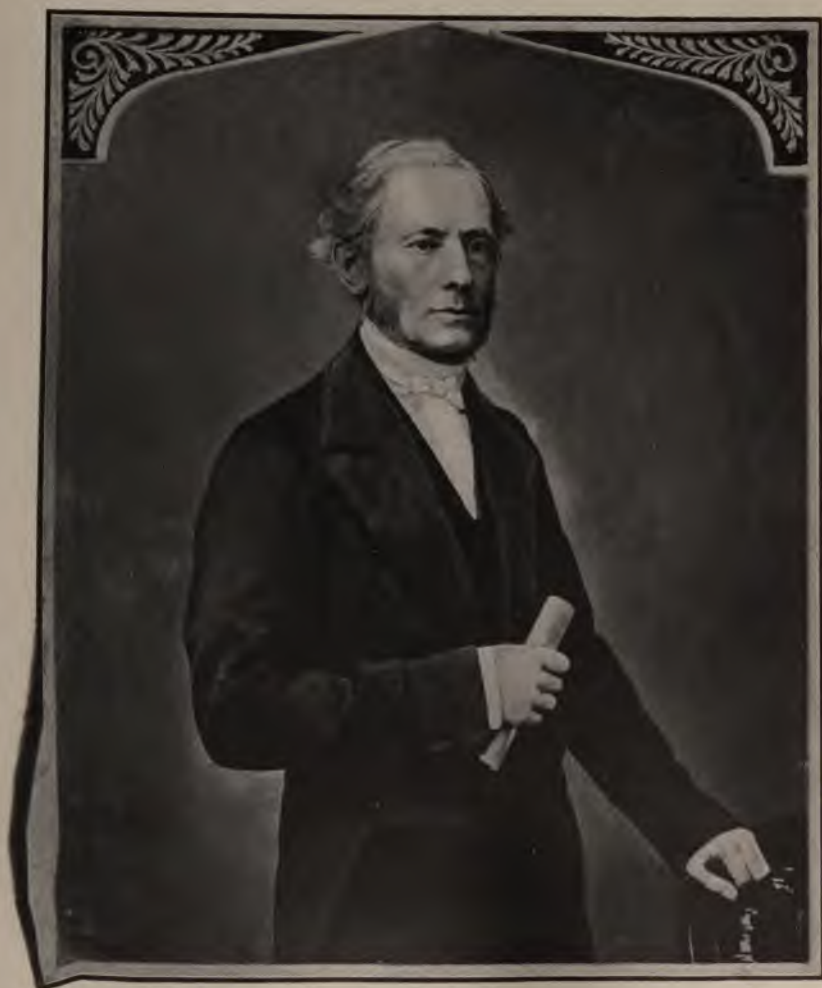
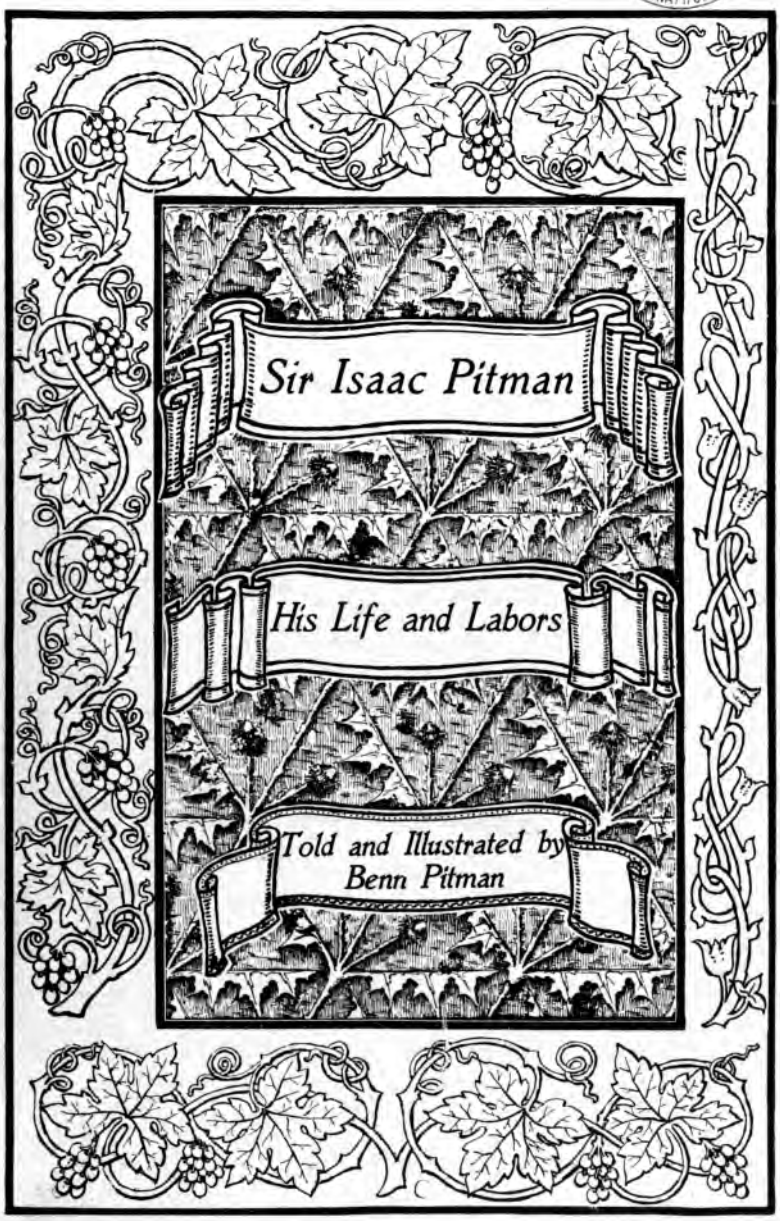
LIFE AND LABORS

OF

SIR ISAAC PITMAN.

AS TOLD BY BENN PITMAN.





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IN my observation of men in different conditions of life, I have not known another whose unremitting, long-continued and unselfish labors in furtherance of any educational, scientific, religious or social project, would parallel those of my brother Isaac Pitman. I have never known another who devoted the physical and mental energies of more than sixty years of life to the development of one idea. Such devotion, in a limited field of thought, might seem more deserving of censure than praise. But when it is borne in mind that it has taken more than six thousand years to give the world so useful, yet so imperfect, a scheme of alphabetic representation as the present script and typic Roman alphabets, and that the aim of Isaac Pitman was to correct and complete, in stenographic writing, longhand script, and printing, this great instrument of civilization, it may be conceded, what is self-evident to every phonetician and intelligent phonographer, that the development and practical application of the phonetic principle to the arts of writing and printing could only have attained their present comparative excellence and wide-spread

acceptance in so brief a period by the entire devotion of one earnest mind, and the collaboration of tens of thousands of enthusiastic helpers. The project to which Isaac Pitman's life was devoted was so far-reaching in its aims and use, was one involving the discussion of so many thousand questions of detail, in which mind, eye, hand and habit were all concerned, and upon which every intelligent person might have a distinct opinion; was one in which so many subtle, technical difficulties were involved—of which only experts, after years of study, would be qualified to give an unprejudiced judgment,—that it cannot be regarded other than singularly fortunate that one so fitted by study and habit should be found willing and able to give his life to the solution of the problem.

That Isaac Pitman and his thousands of adherents, in the old and new world, have accomplished so much in the extension and use of a philosophic system of writing, is due to the admitted usefulness of the art, and to the intelligence and enthusiasm with which its admirers have labored. That they have, collectively, accomplished so little in inducing the English-speaking race to accept a more reasonable and philosophic script and typic representation of the language, is due to the fact that a new scheme antagonizes the settled thought and habits of people, and to the equally important fact that the reform deals with the representation of human speech, which is, by each individual, necessarily regarded from a different standpoint; while the practical representation of this varying speech will be received with varying degrees of respect and acceptation by each of the different organisms to which it appeals. What is more difficult of scientific analysis than human speech? What could be more evasive than an investigation of the nature, and the classification and nomenclature of the labial, dental and guttural explodents, checks, hisses, buzzes, hums and trills that, with vowels as connecting links, make our rapidly-moving vocal organism the means of expressing thought and feeling? And greatly is the difficulty increased when the attempt is made to picture to the eye each of these debatable sounds, in stenographic, in ordinary script, and in typic form, by the best available signs. It is not surprising, therefore, though it is to be regretted, that what Isaac Pitman esteemed the more important part of his life's labor, should have passed into history as "a failure." Justin McCarty, in his "History of Our

Own Times," says, "On January 22, 1897, there died a man who had occupied his whole quiet, noble life with two theories, one of which was a complete success, and the other, up to this time, an absolute failure. All his life long he worked at the realization of his two theories, in the full belief that he was thereby doing some good for the human race. He remained faithful to his purpose through his life. His aim was to lighten the load of the heavily laden. Sir Isaac Pitman's system of Shorthand was a complete success. His principle of phonetic spelling has not advanced one single step since he first tried to set it in movement."

Our historian, who is a member of the British Parliament, is probably more familiar with matters of state than with educational history. Great reforms, especially those involving some radical change in the habits of a people, are necessarily of slow, almost imperceptible growth. But shall we claim that Christianity is a failure, because, up to this time, greed and selfishness, rather than the love of the neighbor, is too often the rule of civilized life? It is an oversight to speak of the Phonetic reform for which Isaac Pitman labored as embracing "two theories." Phonetic truth is one, whether applied to a stenographic, a common script, or a typic representation of the language. A theory that has, during the past half century, won over an army of advocates, that has been accepted and tested, in a thousand instances, in private life and in public schools, and shown to be the easiest and speediest means of reading English, both in Phonetic and Romanic type; that has been pleaded for by statesmen, philologists, philanthropists and educators, individually and in public conventions; a theory that has entered into and modified every English and American primary reading and spelling book, and that has been accepted and used, with varying modifications, in every important English dictionary published of late years, cannot, in fairness, be called an entire failure.

But the prime factor on which success or failure is to be predicated, is not so much the acceptance, as the relative completeness of the scheme, which Isaac Pitman formulated to achieve a Writing and Printing Reform. And no verdict on this question can be just that does not take into account the five distinct phases of intellectual and practical work on which my brother's life was spent. They were, (1) the attainment of a correct analysis of English Speech; (2) the invention of a brief,

philosophic and practical Shorthand; (3) providing a convenient and facile phonetic Script Alphabet; (4) providing a full and complete Phonotypic Alphabet; (5) the attainment, for temporary use, of an acceptable Amended Spelling, by means of the present Roman types.

The success of the first and second phases of the Phonetic Reform is not questioned; and the speedy and wide success of a convenient and philosophic Shorthand is probably less due to the completeness of the scheme than to the general want that was felt by the intellectual and business world for some reliable, brief system which would relieve the writer from the slow and tedious longhand in common use. The success or failure of the third and fourth phases of the proposed reform, is a question that should depend upon the completeness and efficiency of the means offered to meet the ends desired, and any decision here is valueless that does not come from one who has made a special study of the necessary requirements and difficulties which the question involves. The fifth phase of the reform is the problem which is being slowly worked out in England, but with somewhat greater earnestness in this country, and the adoption of an Amended Spelling will, in time, lead to the acceptance of Isaac Pitman's dream, a full and complete phonetic representation of the language,—Stenographic, Script, and Typic. To what extent this has been attained, the causes of its acceptance or rejection, the modification of my brother's belief as to the best means of attaining the ultimate adoption of a strictly phonotypic standard,—these are some of the incidents told in these pages. Difficult and complex was the problem which Isaac Pitman accepted as his life's work, and a wise decision in the settlement of details was not always reached. It may seem unbrotherly to say, but if phonetic history is to be impartially recorded, it must be set down that Isaac Pitman's earnest nature led him to hasty conclusions in important matters of detail; he adopted changes and imaginary improvements, both in Phonography and Phonotypy, when patience, study and further tests would have shown their inexpediency and disadvantage; and thus, he often impeded the spread of the arts he so earnestly sought to establish, and the time, labor and argument incidental to many of his changes were doubled in his efforts to unmake them.

Probably no man that ever lived could be safely taken by

another as a model; certainly not Isaac Pitman. Yet he was the most transparent, unsophisticated, generous, serious, methodical, industrious and pure-minded soul I ever knew. He was self-centered, but his mental vision was so straightforward that it was often confined to a very narrow angle. No one was ever endowed with that supernatural vision which enabled him, from one standpoint, to look quite round a given problem. If the average man of intelligence has a mental as well as a physical range of vision of one hundred and thirty-five degrees, my brother's mental angle would often be an acute one of about one-half of this. Thus early is this judgment hazarded, in a loving way, to make intelligible some passages told of his unique career. Isaac Pitman's main characteristic was his persevering, unswerving, methodical industry. Such was his concentration of thought and energy for his special mission and its incidental labors, that everything else in life was willingly sacrificed; he thus accomplished in his life's span more literary work than any other man I know of. Jules Verne, it is said, boasts having written as many books as he had lived years—more than seventy. Isaac Pitman wrote, compiled, or made more than two hundred and fifty books and booklets, ranging all the way from Bibles, Dictionaries, and yearly volumes of Phonographic and Phonetic Journals, to Manuals, Readers and Primers. My brother *made* many of his books after the fashion of the work of the old monastic scribes, before the invention of printing, in that he wrote—that is, lithographed—the page which was to meet the reader's eye. In all this work there was never a thought of personal merit, possible honor, or pecuniary gain. As he was his own publisher, so was he his own proof-reader, and authors who see only "revised" proofs of their writing and in the customary characters, know little of the perplexities of the average "first proofs" of a new style, and would, as a rule, be quite unequal to the task of righting their varied typic wrongs. My brother's correspondence was immense: the discussion of theoretical points, phonographic and phonetic experiments, letters of encouragement to phonographers, and letters accompanying parcels of books, tracts, and documents, occupied, it is safe to say, nearly one-half of his customary sixteen hours of daily duty.

ISAAC PITMAN was the third of eleven children born to Samuel and Mariah Pitman, at Trowbridge, Wiltshire. The family consisted of seven boys and four girls. The sixth child, Abraham, who gave evidence of unusual mechanical and inventive ingenuity, died at the age of fifteen; all the rest lived to arrive at maturity, and nine of the ten,—Rosella, alone, remaining unmarried,—became the parents of families.

Isaac in his youth was of a diligent and studious habit. He was of a sensitive nature, inclined to be thoughtful, regarding life and its duties as matters of grave concern. He was impulsive only in rendering services to others. His elder brother, Jacob, in speaking of their youthful days, said: "Isaac never had any of that rollicking nonsense about him peculiar to most of us boys, nor do I remember his ever stopping on his way from school to play, but home directly he went, either to his books or to his work." Isaac received his early training in the grammar school of his native town, and left when he had just passed his thirteenth year, having acquired only the elements of a common, but good, English education. He was taken from school mainly in consequence of his yielding, during school hours, to fainting spells, supposed at the time to be due to physical weakness, but which were occasioned, most likely, by the poisoned atmosphere of a too-crowded school-room, for the fainting spells ceased on his leaving school. From seventy-five to eighty boys were stowed away in a room none too large for a dozen. If, as is said, a healthy person vitiates three hundred cubic feet of air every

twenty-four hours, these grammar boys were being poisoned most of the time they spent in school. The play-ground of the school, moreover, was the church graveyard, crowded with head-stones and imposing "table" monuments, round which tears enough had once been shed, but which now were play-houses, over which the boys chased each other in wildest glee. I have a vivid recollection of the old grammar school, and the graveyard, which lay between it and the beautiful Gothic church. The school-room was quaintly arranged with gallery-like desks, reached by four steps, which ran down the longer sides of the room, leaving the center free for recitation classes and the flogging of the boys. The room was also used for the church Sunday-school, of which my father was, on alternate Sundays, superintendent, and in which Isaac and his brothers, when they were old enough, were Sunday-school teachers. At the age of seven I was impressed into service, and, perched on a high stool, I taught boys who were about twice my height their a-b-c's. I have pleasant memories of this grammar school-room, from the fact that on Sunday mornings, before church service, our venerable rector, who was the poet, George Crabbe, usually came through the school on his way to the church vestry, and he rarely passed without stopping to greet me with a few friendly words, and a gentle pat on the head, in recognition, I suppose, of my youthful zeal as a Sunday-school teacher. The poet died in 1832. I followed him to his grave in the parish church, of which, for many years, he had been the rector, and in which each one of our eleven, one after the other, had been baptized, and, lying in the arms of the poet, had received his benediction. It is a curious reminiscence that I should have had this juvenile acquaintance with the poet, and again and again taken the hand that had, before Byron was born or Walter Scott was known, penned lampoons on Washington, while he was engaged in the struggle for American independence!

Isaac Pitman, at an early age, evinced a strong love for books and music. His first instrument was the flute, on which he and his elder brother acquired enough proficiency to be able to lead the singing of the children at the Baptist Sunday-school, of which my father was the founder. It is an evidence of father's activity and love of usefulness that he should, while superintendent of the church Sunday-school, have succeeded in establishing

a Sunday-school in connection with Zion Chapel, the Baptist, dissenting place of worship, which my mother attended. Of this Sunday-school my father, on alternate Sundays, was also the superintendent. The four elder Pitman boys, I being the youngest, were teachers on alternate Sundays, in both the church and the Baptist Sunday-school. Our girls were teachers only in the latter.

Isaac, as a youth, though of modest and retiring disposition, was far from lacking courage, even daring. When he was about sixteen I occasionally accompanied him to bathe, with one or two companions. On these occasions he would sometimes dive from a bridge which was at least ten to twelve feet above the water, a feat which none of his companions, as far as I remember, ever ventured upon. He frequently bathed, and always before breakfast, when the air and water were much too cold for others to think of taking a dip. I recall another illustration of what at the time, seemed great daring, though now it appears to have been a conclusion drawn from my own ignorance. It occurred when Isaac was about twenty. He had returned from the Burrough Road College, London, and in speaking of the great annual meeting of the Burrough Road Society, held in Exeter Hall, usually presided over by some nobleman, he said he would not hesitate to read the annual report before the meeting, consisting of three or four thousand intelligent people, which usually assembled on these great occasions. This seemed to me, at the time, about as daring as offering to lead an army to besiege a city, but Isaac spoke without any thought of boasting, for he had paid special attention to precisely those matters which, mastered, make a good reader,—namely, correct pronunciation, distinct articulation, and other essentials of effective delivery.

On leaving school Isaac was installed as Clerk in the counting-house of the large cloth manufactory of Mr. James Edgell, of which my father was the general manager for twenty years. It was a quiet boast of my father that during this time he had made a large fortune for his master, and had had his own salary raised eleven times, and once only from his own asking. After Isaac had been a year in service he begged piteously, I have heard father say, to be allowed to go back to school. Father did not think it best to consent, but advised his boy to stick to his desk and devote his leisure to books and study. Leisure! The poor

lad went to work at six o'clock in the morning, as father did, continuing until six in the evening; yet Isaac found time for systematic study. He rose at four o'clock, and he and his brother Jacob devoted every moment to their books and study till they left home for their daily duty; and each evening gave them one or two additional hours for study. Father always took the greatest interest in the intellectual progress of his children, showing a wise discretion in giving them occupation which secured progress, at the same time keeping them from idleness and its mischievous results. At two periods in the family history father engaged a lady teacher to give us evening instruction. In the latter period, in which alone I participated, we supplemented our day school exercises with private instruction five evenings in the week. In Isaac's time it was only twice a week. The teacher was a Miss New, the daughter of the only bookseller in the place. She was a lady of sweet disposition and good general culture. This lady also gave to the four elder children instruction on the piano. The instrument on which they practised was a triangular harpsichord; after two years of practise, when the young people had acquired some skill in fingering, it gave place to a genuine piano, a Broadwood of five and a half octaves. This was considered a great event, and the enjoyment which Isaac derived from the use of this instrument seems to have led him to regard it as a special gift from Heaven. In proof of his gratitude, he saved his pocket money till it amounted to five shillings—a large sum to him—and then having procured a silver crown, a coin somewhat larger than the American dollar, he quietly dropped it into the contribution box of Zion Chapel, a thank-offering which Heaven, if so pleased, might accept as evidence of his gratitude. This incident was unknown to any member of the family till years afterwards, when Isaac himself told it in one of his merry moods.

From thirteen to nineteen Isaac Pitman was a self-instructed student. The bookseller at Trowbridge had a lending library, said to be one of the first established in the country; to this father subscribed, and Isaac greedily availed himself of the privilege it afforded. While music was his pleasure and enjoyment, good literature had a great attraction for him, and Milton, Addison, Pope, Steele, Johnson and Cowper were favorites, whose writings were not merely read, but critically studied, and considerable portions of them, both of prose and poetry, were committed to mem-

ory. During his clerking days, when he was about sixteen, he began the study of Taylor's system of Shorthand, a cheap edition of which was published, at three shillings and sixpence, by Harding, a Birmingham teacher of Shorthand. Previous to this the lowest price at which a work on shorthand was published was half a guinea—ten shillings and sixpence. Isaac Pitman made use of the art for private memoranda and for making extracts from works he read—thus preserving the extract and partly memorizing the matter, till in two years he could write about eighty words a minute.

It was at this early period of his life that Isaac Pitman's attention was called to the disparity between the printed and spoken language. In reading he frequently met with words, the meaning of which he understood, but never having heard them in conversation, he was doubtful as to their correct pronunciation, and the only recourse was reference to the pronouncing dictionary. This occurred so often that he resolved to read carefully through Walker's Pronouncing Dictionary, and copy out every word whose pronunciation or spelling was unfamiliar to him. When the task was completed, he found that he had a list of about two thousand words, which he copied with the proper diacritical markings, and these he committed to memory, both as to pronunciation and spelling. Two years later, when he was a school teacher, he repeated this somewhat notable task. He made a patient and somewhat thorough study of grammar, committing to memory rules and exceptions, lists of regular and irregular verbs, and the manifold particulars which need to be observed before language can be used in a grammatical, clear and definite verbal expression, and thus he attained a style of writing which, through life, characterized all that Isaac Pitman wrote.

Isaac, in my youthful days, exercised an influence over the rest of the family that no other of my brothers or sisters did. We played no pranks on him, but had a certain respect for his word, and regard for his authority, not unlike that we felt for father's. I distinctly recall that when I was about eight years of age I did something of which Isaac disapproved. I saw I was to receive a reprimand or something worse, so off I ran, without counting the cost, for Isaac pursued and, catching me, said, with perfect calmness, "I will punish you for doing wrong, and then I will punish you for running away," and so he did, by giving me some

vigorous thumps. It would be unfair to my brother's memory if I did not say that, later, when he became a school-teacher, he avoided corporal punishment on principle, as far as possible, and when he had eighty boys in his charge, and I was his assistant, the punishment must have been slight, for I have no distinct recollection of a single flogging.

The seriously active and self-denying nature of Isaac Pitman naturally fitted him to become a Wesleyan Methodist. He could not feed on the dry husks of Church-of-Englandism of that day, nor would his reason permit him to accept the chilling faith of his mother's unthinkable Calvinism, and so, when about eighteen, he became an earnest and devoted Methodist. Wesleyan Methodism, seventy years ago, retained much of the simplicity of life, dress and manners of Wesley and his immediate followers, and their Methodism was an active propagandism, Christian zeal, and devotedness to spiritual things like that which characterized the life and labor of that beautiful soul, its founder. Those were days before Methodism became respectable; when Methodist chapels were barn-like structures; when its adherents were, for the most part, gathered from the people, and not from the classes; when Methodism was regarded not merely as a heresy, but an apostasy from the church, and, perhaps, the least respectable and most disliked form of dissent. One, like my brother, who would be claimed as a Church-of-England youth, would be ostracized by a defection to Methodism. It needed the heroism of high resolve to avow himself a Wesleyan in those early days of Methodism. Church-of-England toryism of that period met all forms of progress, whether religious, political or educational, in a spirit of bitter hostility. What intolerance we have outgrown, even within the memory of the living! The views and feelings of the majority of the English clergy of that day are reflected in a passage worth recalling, which refers to the proposed repeal, by the British Parliament, of those unjust, cruel and obnoxious restrictions, social, civil, and political, to which Catholics, Quakers and some other Dissenters were then subject, known in history as the Corporation and Test Acts. "If the present ecclesiastical constitution must fall, far better is it to consign ourselves to the high-toned toryism of popery, than to crouch to the abject republicanism and the low-born canaille of dissent." This occurs in the "Lives of the Bishops of Bath and Wells," by the Rev. S. Hyde Casson, M. A., F. S. A.,

1829, and Methodism is the special heresy aimed at! From to-day's stand-point, it seems amazing that a cultured English clergyman should thus commit himself to record with respect to a branch of the Christian church, which, in this country at least, has grown as "respectable" as Episcopalianism, quite as wealthy, and, socially and politically, more powerful. How utterly the conservative spirit of that day misread the growth of human progress; how completely they failed to divine that in little more than half a century, these despised Wesleyan seceders would worship in their own Gothic churches, and aid their devotional services by vested choirs whose performance would equal those heard only in their own cathedrals. This spirit of opposition to needed progress was afterwards encountered by the subject of this memoir, when he proposed to smooth the path of learning for the young by the reform of English spelling. Methodism suited the active temperament of Isaac Pitman, if for no other reason, than that it gave him something worth doing on the Sunday, for he was barely twenty when he began to preach, and to meet this duty meant considerable thought and preparation, and often a walk of many miles into the country before reaching the scene of his appointment.

THE intellectual and moral rigidity of Isaac Pitman's character came from his father, who was, in family matters, a disciplinarian. He was strict, indeed severe, but never harsh in the treatment of his children. We were taught to obey, and we did so from habit, influenced doubtless by knowing the penalty of disobedience. Father's requests, disagreeable though they might seem, were complied with promptly and without an audible murmur or clouded brow. We were probably not so prompt as the Wesley children, of whom John Wesley said that if he and Charles were writing, they would stop in the middle of a character to obey a command from either mother or father. If the Wesley children were not born to obedience, the mother, before they could walk, "broke their wills and reduced them to subjection." Our mother's commands were not always obeyed with like promptitude. Her request might be met with little objections, but a repeated "Please do it" was instantly obeyed, for well we knew that disobedience would be reported to father, and that would only add to the gravity of the offense. John Ruskin says the best and truest blessings of his life came from his being taught perfect obedience, and the meaning of peace in thought, aim, and word. "I never had heard my father's or mother's voice once raised in any question with each other, nor seen an angry or even slightly hurt or offended glance in the

eyes of either;" and "I obeyed word or lifted finger of father or mother, simply as a ship her helm." I think few will read the passages John Ruskin wrote of his childhood without concluding that the exacting discipline of his mother would have harmed and hardened a less gentle nature. We, surely, were equally blest, for an angry or even hasty word or a passionate glance of the eye of either of my parents would have been as unlooked for and startling to me as the lifting of the roof or the upheaving of the foundations of the house.

The Pitman boys were disciplined by whipping,—six or eight strokes on the back, with coat removed, were given with a strap, "which broke no bones." We were called up to father's desk, no flinching was allowed, and the chastisement always wound up with an affirmative response to the question, "Will you promise not to repeat this?" We cried aloud, but were careful not to make too boisterous a demonstration, knowing that would only bring an extra stroke or two. The girls were never whipped, and I do not think the boys were subjected to corporal punishment after they were thirteen or fourteen years of age. Father never punished a child in anger, and a passionate or hasty blow was a thing unknown. Our chastisement was inflicted from a parental sense of duty, and was administered with such judicial impartiality that generally I felt, by the time the tears were dry, that the penalty about balanced the crime. This was a period when the old style of corporal punishment was in vogue, when the chastisement of boys in public and private schools was, from today's standpoint, brutal in its severity and frequency. I remember being one of nearly two hundred boys in a school where, on one occasion, every boy was whipped for the prank of an undiscovered culprit. We were ranked in single file, and, as the master came up, the right hand of each possible culprit was extended, palm uppermost, and a sharp blow was struck with a cane. Some boys would screw up their nerves to bear it with a suppressed grin, but to a sensitive nature and skin the pain was horrible, and the hand would smart for hours after the punishment. If a boy, in his terror, withdrew his hand, as many did, he was given a double stroke. It was noticeable in our family that as it increased, the punishments grew less frequent, and the younger boys knew less of the severe discipline that fell to the lot of the elders. There was a legend in the fam-

ily, among the children, that Isaac was never whipped, meaning that he never needed it. Only grave offenses were punished—grave from the child's standpoint—ordinary ones were condoned with a reprimand or caution not to offend a second time. The last whipping for which I was "called up to the desk," was, I remember, for enticing my younger sister into a quagmire, in which my clothes were much bespattered, and my sister was smirched to her knees. The experience I have gained in the seventy years since I received my last whipping, leaves me in doubt as to the efficacy of corporal punishment, and I think that equally good results in our case might, in the long run, have followed a milder course. Who can tell? There seems to be no unvarying rule for the management of children, so unlike in physical and mental organization, and especially in the wondrously changed social conditions of today, save that of never-ending lovingkindness, tempered with infinite patience. It is noteworthy that none of father's nine children, who have reared families with differing degrees of success, have followed his somewhat severe rule.

In my early days, the English family had not outgrown the feudal system. Children were made to feel they were but serfs and thralls with "no rights," only duty and service to those whom Providence had set over them. When I think of the easy familiarity with which my children treat me, I recall with amazement that in my young days, on each return from school, on entering the room in which my mother sat, standing near the door, I made my customary bow of salutation, repeating, with becoming gravity, "Your servant, ma'am," or "Your servant, mother."

A bit of English history is associated with one of the latest of my punishments. One summer evening father and mother had left the house to attend the weekly service at the chapel. It so happened that on the afternoon of that day I violated some rule, and for the offense was promptly sent to bed immediately after tea. A few minutes after my parents were out of sight, the London stage-coach came in, stopping at an inn opposite our house. Something unusual had happened. The London stage-coach was decorated with flags and evergreens, and the guard blew his horn with unusual vigor while driving into the town. A crowd instantly collected around the stage-coach to learn the

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exciting news that the Reform Bill had past! A few minutes only seemed necessary to bring out the town band. A procession was formed, and the townspeople marched and shouted as only victorious patriots can. I joined the procession and made one of the shouters. Jubilant as a ten-year-old boy may be, I was prudent enough to be back in bed when my parents returned. The Reform Bill, bitterly opposed by the nobility and all the rich, conservative classes, after years of struggle was finally past (1832), and a revolution averted! The Reform Bill abolished the "rotten burroughs." In my native county, Wilts, old Sarum, with its thirteen voters, sent two members to parliament, while large, populous towns like Birmingham, Sheffield, Leeds, and, I believe, Manchester, had no representation.

I had grown to manhood, and left home, before the thought ever distinctly occurred to me that my father was other than an ordinary personage. I knew that he was intelligent, that he was very generally looked up to, and his advice in township matters not infrequently sought. I knew he had executive ability to manage a large cloth manufactory, and was equal to the adjustment of the many conflicting human interests that grew out of such a charge. I knew that he had been an earnest educational pioneer. Determined on some form of popular education, he had secured subscriptions and had seen a large school house built—the first, I believe, in the west of England—for the instruction of the children of the working classes. Such schools were conducted on the "Bell and Lancaster" systems. They were unsectarian, and were frowned upon by the supporters of the established church. It was years afterwards, in my native town, before church people followed in the "revolutionary" road, and built their first parochial school. I knew, too, that my father had been the moving spirit in the establishment of the first Infant School in our town, on the Pestalotsian system, and further that he had aided the temperance movement years before the teetotal crusade. I knew he had established a library for his work-people, and stocked a room with a few hundred readable books, and that he frequently sat there and read of an evening to encourage a few among the working people who could read, to spend their evenings in like manner. I knew, too, that his influence and example had prevented our home from being occasionally turned to a domestic bedlam. In my Uncle X's family the

children frequently quarreled and scolded at meal and at other times, after the proverbial fashion of "cats and dogs." I knew that in Uncle L.'s family, though, the children were as well instructed as we were; they thought less of books and studies than of business and getting rich by availing themselves of the labor of others.

It was thus only after I left home and was brought in contact with other men that I realized how much father differed from the majority. He was freer from illusions than most men. He did not imagine that his opinion and criticism were essential on all points and occasions; he was therefore a man of few words, but what he did say seemed reasonable and pertinent, and better said than left unsaid. He was wholly free from the illusion of attaching importance to creeds and dogmas. He knew that the views of men relating to life, here and hereafter, had been matters of growth and change from time immemorial, and that it was no part of wisdom to assume certainty about things concerning which the wisest and best of men radically differed. He was not only tolerant of other people's views on politics, religion and morals, but they seemed to interest him chiefly as indications by which to measure the worth and credibilty of men. He always seemed more willing to listen than to talk, and he had Sir Walter Scott's instinct of getting out of people what they knew that was of interest or importance. In politics he was a Liberal, though his master, whom he served till mid manhood, was a stanch Tory. The political representative who seemed concerned for the public welfare rather than upholding class interests, always commanded his vote and earnest support. The removal of ignorance, by the dissemination of knowledge, father regarded as the important work of his life, and efforts in this direction occupied all the time he could spare from the somewhat exacting duties of his cloth-manufacturing business. He enjoyed good health. I never remember him ailing in any particular; indeed, for father to have complained of head, heart or stomach-ache, would have seemed so much of a novelty as to be akin to a joke. He never coddled himself with any form of table luxuries; he ate simple food, and was compensated by enjoying it to the latest days of his life. He was essentially a man of action, but wholly free from a hurried, or bustling habit. He was always occupied, and I never remember seeing him deliberately seat himself to rest. When the day's

duties were over he took his arm chair by the fire, but never without a book, which he would close up on his thumb, if anything of interest made an occasion for talk with mother or the children. In these days of changing fashion in dress it is worth recalling that father, all his life, retained the habit of his youth and wore knee-breeches. "Full dress," when he left the house or counting-house for town calls, church, or meeting, consisted simply of donning gaitors to cover his stockings. Black broadcloth constituted his uniform clothing. Recreations? He had none. His business took him to London,—one hundred miles distance, by stage-coach,—about twice a year for a stay of three to five days. When I was about twelve years of age I enjoyed the great treat of being taken to London on one of these journeys. Father was my guide for a week, and a visit to the National Gallery, the Cathedrals, the Tower of London, the Sloan Museum, and a few other of the rarer sights of the great metropolis,—when I saw fine pictures, fine statuary, fine buildings, fine missal illumination, and a forest of shipping for the first time,—were sensory visions, that have remained so vivid that they made a sort of mental nuclei, round which seem to cluster all that has since reached my brain through the sense of sight.

Yet father's education in his boyhood was limited in the extreme. I have frequently heard him say—I think more as a boast than a confession—that he received but one week's regular schooling in his life. He must have been a youth of unusual aptitude and diligence; for by the time I was old enough to judge, he was considered a well-informed man. He had made a special study of astronomy, so that he could calculate eclipses; and, after the fashion of the period, he became absorbed in astrology. Our Family Bible contained the carefully-drawn horoscopes of every member of the family, all the work of father's brain and hand. In after years, to his credit be it said, he lost all faith in the influence of the planetary system on human destinies.

My mother was calm, sweet, and placid at all times. I never saw her angry, and I have heard that she had never been known to utter an unkind or reproachful word of any person, present or absent. She had strength and firmness of character, combined with perfect conscientiousness. Her smile was exceedingly sweet; but she was never known to laugh. Her features

were regular, comely, and pleasant, rather than beautiful. Her face, even late in life, showed a skin of clearest texture, and of a pinkish hue like that of healthy childhood. Her general culture was limited. Her reading, in the little time left from family cares, seemed confined to the Bible and Calvinistic literature. She was by nature and training of a devotional temperament; and the extreme Calvinistic doctrines, under the influence of which she was born and bred, could not but tend to give life and its after-prospect a necessarily serious and gloomy aspect. I suppose, dear heart, her inmost assurances were that all her own children might be of the elect. My mother's nose was of perfect Grecian type, save that it was perceptibly flattened at the tip. Isaac had father's slightly bridged nose, with mother's tip. On one occasion, when Isaac returned home after a year's absence, my mother hastened to meet him; but the hallway chanced to be in darkness. In the embrace, my mother, to relieve her mind of any uncertainty, felt for the tip of his nose. "Yes," said she, "it is Isaac; I could not be mistaken." The conduct of the girls of the family was greatly influenced by mother's serious and religous feeling. I never heard a word of small talk at any meal, relating to dress or fashion, or any trivial personal matter. As a rule, the children under fourteen were expected to be silent, and those under twelve stood while eating. None of the girls were allowed to indulge in such worldly adornment as curls or puffs, or to wear ribbons in their hair. No jewelry of any kind was ever worn by any member of the family. The only exception to this was in the use of a small, round-headed gold pin that fastened mother's muslin neckerchief. None of the children were taught to dance. Playing cards were never seen in the family circle. Probably every member of the family grew to adult age without having handled a card, or knowing the name of any one in the pack. Omens, lucky and unlucky days and things, were not recognized in the family, and were never mentioned save to laugh at them. After Isaac left home and became a school teacher, Wesleyan Methodist, and a preacher, his letters, which were frequent and long and beautifully written, must have greatly influenced mother and father; for then daily family prayers were, for the first time, established and regularly observed. A chapter from the Bible was read, each of us taking a verse. This was followed by an

extemporary prayer from mother; and how pleading, pathetic and devotional it was! What else could come from a pure and lovely soul who had been taught to believe herself the "chief among sinners" and who could hope to escape eternal torture only by the free grace and abundant mercy of a terrible God? My mother's life was, on the whole, singularly free from any abiding sorrow. Neither her husband, his affairs, her household, nor her children brought her, as far as I remember, a single real trouble. Yet her gloomy faith made what should have been a sunlit existence unduly grave and somber. In a retrospect one cannot but wish she had possessed the reasoning suspicion of the pious Scotch mother, whose boy having been "cut off in his sins," and, from the orthodox standpoint, doomed to pay the eternal penalty of the non-elect, was prayed for by his stricken parent: "Oh, Lord, if Ye had been a mither, Ye nae wad hae done it."

Kingston House
Residence of Mr. Samuel Pitman

Kingston House was selected by the appointed Committee of British Architects to be reproduced at the late Paris Exhibition, as the best available type of a fine English Home. "The reproduction at the British Pavilion of the Paris Exhibition of Kingston House, Bradford-on-Avon, has naturally attracted fresh attention to that fine specimen of British architecture of the period when the strong castle having become obsolete, the lordly mansion took its place. One of the most interesting associations of Kingston House is that for many years it was the home of the Pitman family." Mr. Frederick Harrison writes: "The British Pavilion, though one of the least conspicuous, is the best and most truly artistic in the whole Street of Nations,—the only one, indeed, that a man of taste can view without a smile or groan."—*London Press.*

THERE were two in our family whose characteristics were of so serious, self-denying and earnest a type, that their individuality must have stood out in marked relief among the young people with whom they associated. Melissa was the first-born, and between her and Isaac, who was four years younger, there was a spiritual kinship that probably, though unconsciously, influenced my brother's entire life. She was the first of the family to break away from the cruel logic of Calvinistic orthodoxy in which the family had been schooled, and she was the first to suffer persecution, and pay the pioneer's price for taking an advanced step in the religious evolutionary march. Melissa was a teacher in the Sunday-school, and a regular attendant on the Calvinistic preaching of the family minister, when she was spiritually aroused by the teachings of a new sect that invaded our town, professing to preach and practise the doctrines of the earliest Christians. They were called Irvingites, and from 1825 to 1835 attracted much attention in England, the sect spreading rapidly through the large towns, though the congregations were never large. My sister attached herself with entire devotion to this revived primitive church. Though her life was full of duties, she was never absent from their daily morning and evening services, the first beginning at six o'clock in the morning. These people professed to follow the rule and practise of the primitive Christians, and called themselves the Catholic Apostolic Church. They set duty before dogma, and insisted on daily life and conduct that should square with an educated Christian conscience. I do not remember that they advocated a community of goods, but they consistently revived the early Christian practise of paying a tithe of their income to the church.

The religious community from which my sister seceded were greatly moved, and considered it their duty to be shocked and scandalized at her conduct. Our preacher was a remarkable man. In bodily proportions and positiveness he was a veritable Dr. Johnson, and he must have excelled the learned Doctor in strength of lung. He was a man of very limited culture, but was profoundly religious, gloomy, and dogmatic. He had a stentorian voice that did not lack a certain rude melody and persuasiveness when he became aroused, as was his wont, in the latter part of his sermons. Then his voice rose and rolled in such tumultuous waves that he greatly impressed those who were within the tabernacle, and I have heard my father say that he had distinctly heard the preacher's voice through the open windows a quarter of a mile from the pulpit. Our minister did not like the defection of a member of one of his leading families, and he thundered his invectives and metaphorically shook his pastoral crook at stray lambs, and the whole congregation knew that it was my gentle sister who had strayed from the shepherd's care.

The Irvingites, as a sect, seem to have disappeared from the religious world. The founder was Edward Irving, a Scotch minister, who had been assistant to Dr. Chalmers in Glasgow, but it was not until he settled in London that he became a celebrity. He was a man of remarkable intellect and extraordinary oratorical powers. That he was the loved and admired friend of Thomas Carlyle, and had been the teacher of Jane Welsh, who became Carlyle's loving wife, are facts which indicate that he was a man cast in no ordinary mold. Irving was tall, grave and solemn. Earnestness and deep religious fervor pervaded his delivery. His aspect was commanding and his countenance was marked by a dark and melancholy beauty. The tones of his voice were remarkably deep, melodious, sympathetic and of unusual power. Irving's oratory must have been of no ordinary kind to call forth a reference to it from Canning, in the House of Commons, mention of which is made in the sketch of Irving's life, given in the last addition of the Encyclopedia Britannica. Such was the powerful influence of his preaching that it gave rise to a class of extraordinary manifestations, which, by his followers, were believed to be of supernatural origin. Men and women in the congregation, the latter more especially, would shriek out strange, weird, unintelligible utterances, that

were deemed prophecies by Irving's followers. These utterances, which were called "unknown tongues," have since been generally regarded as hysterical, psychic manifestations, due to the preacher's religious fervor, his hypnotic and extraordinary oratorical powers. This, evidently, was the view of them taken by Irving's more intelligent cotemporaries, and certainly by Mrs. Carlyle, with whom, before her marriage, Irving was once deeply in love. She is reported to have said, "Had I married Irving, there would have been no unknown tongues."

Irving is credited with first using the expression, "The fatherhood of God," and he preached a faith in accord with the thought. The phrase caught the religious world and had much to do in lessening the terrors of the older religious belief. The great preacher seemed gifted with prophetic fore-light. He did not accept the social disquietude and antagonisms of life as other than passing conditions, from which St. James' Christianity would deliver, first the church, and ultimately the world. Years afterwards some writer of note used the equally expressive phrase, "The brotherhood of man," two short terms that express a modern phrase of belief and hope, and which have tended to humanize the religious and social thought of today. The evolutionary idea, however, might be credited to the progress of human thought that grew out of the American revolution, for more than a hundred years ago, Thomas Paine used the all-embracing expression, "The brotherhood of the human race," to typify an ideal, universal fraternity, in contradistinction to the then prevailing rule of Kings and the submission of Subjects.

Edward Irving, like John Wesley, was highly susceptible to aesthetic emotions. On one occasion he accompanied some aristocratic ladies of his congregation on a tour through one of the poor districts of London, in search of children to attend their school. In one wretched apology for a home, they found a child of exceptional interest and beauty, with large blue eyes, and long, wavy golden hair. Now it was a rule of the school that every child should have its hair cut short. Irving's eyes and heart were moved by the child's beauty, and he is said to have feelingly joined the mother in her pleadings to spare the child's golden adornment; but the high-born dames had no heart to be softened by their appeal; the iron rule was not to be broken.

Only a soul of unusual worth, possessing in no ordinary

measure the gifts of intellect, imagination and expression, would attract the friendship and excite the admiration of men so unlike as Chalmers, Coleridge, Carlyle, Wordsworth, Wilkie, Sir Wm. Hamilton and Canning. Irving throughout his brilliant but brief career, was equally remarkable for his child-like simplicity and mental and spiritual gifts, as for his amazing credulity. In keeping with his unsophisticated nature was an incident which occurred at one of his London, suburban, open-air preachings. During his discourse, when a standing throng of thousands hung breathless on his words, an alarm was created by the cries of a mother, whose child had strayed from her side and was lost in the vast assembly. But soon the child was raised aloft in the throng, and the excitement of the mother was calmed as Irving cried aloud, "Give me the child." The preacher took it as it was passed over the heads of the crowd, and it instantly nestled on his breast in perfect peace. He continued his discourse, but now his theme was changed to the Saviour's loving regard for the young, and with the child tenderly held in his arms, he concluded an exhortation of such winning and commanding eloquence that all who heard it would probably retain a vivid impression of it through life. Irving's teachings did much to mold the ethical and spiritual character of my sister, and she, in turn, influenced and strengthened the moral and spiritual fiber of her sympathetic brother Isaac.

How it came about I do not know, but it so happened that a leading family at Trowbridge, who were the disciples of the "new lights," were a family of wealth and intelligence. They must have been attracted by my sister's devotional earnestness, and she became so much of a favorite that she was invited to accompany them to London on a religious pilgrimage to see and hear the celebrated divine. They were the guests of Mr. and Lady Drummond, an aristocratic family of intelligence, wealth, and the highest social standing, all of which had been dedicated to the service of the newly-arisen prophet. Seeing and hearing the great leader made a profound impression on Melissa, and added, were it possible, a tenfold zeal to her devotion to primitive Christianity. She became more severe and Quaker-like in the fashion of her dress, eschewing all colors but black or the somberest gray. I recall an instance of her ascetic rigidness. A mirror which hung over the mantel of her sitting-

room she had removed, that she might not be tempted to cast a glance at her reflected image on passing it. She conducted a private school for girls and instructed pupils on the piano. She was active, but serene, intelligent, self-sacrificing, and devotional. She was not a bigot, but was always anxious for further light. In the course of a few years she became, through Isaac's influence, a reader and receiver of the doctrines of Swedenborg, and so continued to the day of her death.

IT was an important event in Isaac Pitman's career, and, though unforeseen at the time, proved to be the turning point in the destinies of the Pitman family, when Isaac, at nineteen, left home for the Borough Road Training College, London, father having decided to make him a school teacher. This was at a period when the necessity of some general system of education for the people first began to arrest attention in England, and before school-teaching was a recognized profession. Great was the surprise of our relatives and friends at father's odd determination, but he had resolved that had he a hundred children, to use his own words, he would not bring up one of them to his own business, with its cares, perplexities, competition and possible misfortunes. In subsequent years, five others of the family—Jacob and Joseph, of the boys, and Rosella, Jane and Mary, of the girls, were received and trained in this college and afterwards appointed to schools in different parts of England. So thorough was the satisfaction which Isaac gave at the training college, and so encouraging were the reports he himself sent home, that Jacob, who had served seven years' apprenticeship to a carpenter and builder, concluded that school teaching might be the more profitable use of his life, and when father personally applied at the college for the admission of another of his sons, the Director, the able and admirable Henry Dunn, answered with a compliment which father was fond of repeating, "Yes,

you may send me as many more of your children as you can spare."

The Borough Road College, in which Isaac Pitman was now installed, was the great central parent school, in which young men and women who were sufficiently educated were received to be trained in the working details of the Bell and Lancaster system of popular instruction. The college consisted of separate departments for male and female teachers, and each department had a double function, the training of teachers and the instruction of the young. The teachers were domiciled at the institution, which included two large schools for boys and girls, in each of which four or five hundred children, from seven to fourteen years of age, received an elementary education. It is a novelty, from today's pedagogic standpoint, to recall a visit I made to this institution more than half a century ago, when I witnessed its semi-military and somewhat despotic training and discipline. In the great parent school I found nearly five hundred boys assembled in one large square room, the floor of which, rising at a slight angle, theater fashion, had its center filled with parallel lines of desks and seats, facing the front, leaving a space of nine or ten feet at the sides for recitation classes. A somewhat high and imposing platform, on which the teacher was seated, occupied the lower end of the room. The youngest children were seated nearest the platform and were graded towards the upper end according to age and general proficiency. The system of instruction of Bell and Lancaster is monitorial, methodical, and semi-military in its operations. All movements of the children, such as turning and showing slates for the inspection of the monitor; all changes, such as leaving the seats for the recitation classes, are directed by a brief word of command, given by the monitor of the day. At a given command the children would, simultaneously, cease writing, and at another command they hung their slates on a screw fastened in the desk in front of each boy. At another command they turned in their seats, facing to the left, resting the right hand on their own desks and the left on the edge of the desk immediately behind them; at another command they jumped out and stood, facing the direction in which they were to march, each boy standing erect, eyes to the front, with hands clasped behind him. They remained in this position till their line was ready to march to the semi-circular rings which

marked their respective classes in the aisles. The marching was commenced by the first boy of the lowest row and the first boy of the uppermost row starting simultaneously for their classes. As the last boy of the first row left his desk, the first boy of the second row followed, and so on until the seats were emptied and the aisles filled, when the monitors took their places in the center of each class, with pointer in hand, to direct attention to the suspended chart or board, on which was pasted the lesson of the day. Books were used only by the advanced classes. At the time referred to, I think the only book used was the Bible, possibly the New Testament only; all the instruction in grammar, arithmetic, geography, history and geometry—the only branches, with writing, then taught—were contained in clearly-printed charts and tables. The Bell and Lancaster system, as before intimated, is essentially monitorial, but in the London training school the monitors were the young men and women who, in actual service, gained the knowledge they aimed to acquire. Visitors to these schools, who knew by experience the terrific noise of an average grammar school of that period, with its fifty to seventy boys, conning their lessons aloud,—the babel-like confusion being a necessary condition of memorizing their lessons, as I have again and again heard them avow,—were much impressed on seeing a large concourse of children seated in perfect order, and pursuing their exercises in almost absolute silence. Quietude in a large assembly of children is impressive, if only from the fact that, where children are gathered in numbers, we naturally expect a certain amount of noise, varying, according to circumstances, from a whisper to a noisy riot. In this case the quietude was emphasized by the monitor of the day, who, standing aloft at the bottom of the room, slate in hand, would occasionally break the silence by calling out, in a subdued tone, and writing down the name of any restless culprit who turned his head, whispered to his neighbor, or sneezed or coughed with undue energy. One novel effect of the discipline of the school I recall. I was one of a group of visitors, and, standing on the platform, we looked at a sea of brown heads bent over their slates and working away at their exercises in studious quietness. The time had arrived for the reading, by the master, of the morning lesson from the Scriptures. The monitor, having stopped the writing, directed the slates to be hung, stood facing the

school, with his right hand uplifted, but closed. At the word of command, "Heads!" all eyes were fastened on the monitor's hand. Suddenly opening it, in an upward direction, every boy, whose head a moment before was perhaps somewhat lowered, for effect, was jerked up and back, so that the visitor saw something akin to a flash of light as the bright sea of juvenile faces was suddenly brought into view. In this position of rapt attention, with the head thrown somewhat too far back for comfort, I thought, the lesson was read, and not a movement or unnecessary wink was seen in that disciplined army during the reading.

The Bell and Lancaster system, the first British popular educational experiment, met the requirements of that period in perhaps the only practicable way. In the absence of any municipal or state support, the schools had to be conducted on the most economic principle. The schools were not wholly free; to make them so would have offended British independence. Each pupil paid two pence per week, and the remainder of the necessary revenue was made up by private subscriptions of the well-to-do classes. Inefficient as the scheme might be considered from the present American standpoint, with its free graded and high schools, it furnished an illustration of the success of one educational factor which, in the future, may, with advantage, be ingrafted on the American school system, namely, the monitorial scheme, which has something more than economy to recommend it. Utilizing some of the time and knowledge of the more advanced pupils in giving instruction to the less advanced, would be discipline of exceeding value, and such aid would lessen the strain and nervous tension to which the average teacher of today is subjected by taking exclusive charge of a class of forty or fifty children.

Isaac Pitman spent five months at the London training college; he was then appointed to a school at Barton-on-Humber, in Lincolnshire, a town of four thousand people, lying on the flat, muddy banks of the estuary, separated by two or three miles of tidal mud and water from the flourishing seaport of Hull. The school of which he took charge was founded on Long's charity; it was attended by one hundred boys, and the salary of the teacher was £70 per annum; afterwards, when his efficiency was discovered, it was increased to £80.

Now, for the first time in his life, being his own master,

Isaac Pitman was left free to follow the bent of an unusually conscientious and devotional nature, and he gave himself up, with enthusiam, to a life of systematic duty and self-denial. Seven hours were devoted to the school, seven hours to sleep, and the remaining ten were consecrated to study, devotional reading, self-discipline, and, according to his light, to the service of the Master. He parted his hair in the middle, at a time when it was seen only on women and in the pictures of Puritans and Saints. He abandoned music because he could make, as he conceived, a better use of the time, and fasted on Friday of each week. At one time he touched no food during the entire day, a somewhat absurd asceticism, seeing he was no professional saint, or anchorite, but a hard working schoolmaster. Finding it lessened his energy and impaired his usefulness, he abandoned such extreme abstemiousness and henceforward limited himself to the omission of one or two meals. His Friday fasting was no make-believe substitute of fish for flesh, but a fast in fact as in name. He wrote and distributed temperance tracts, lectured on the evils of intemperance, and tried his utmost to wean the sea-faring folk of the little town from the use of rum. He preached and conducted class-meetings, and was accounted the most zealous of the Methodist flock. His friends, who knew him best, said that in zeal and self-denial he out-Wesleyed Wesley. His sense of duty made him intensely earnest, and his innate conscientiousness saved him from being the least bit of a hypocrite. During his four years' residence at Barton he read through the Scriptures published by the British and Foreign Bible Society, and corrected the errors in the parallel references, and for the second time he carefully read through Walker's Pronouncing Dictionary, making, as before, a list of words about which he felt a doubt either as to spelling or pronunciation. To his satisfaction the list proved less numerous than at the first reading. His correction of the references in the Scriptures of the Bible Society led to the colossal undertaking of correcting the errors found in the five hundred thousand parallel passages of Bagster's Comprehensive Bible. His mastery of Walker's Dictionary, and especially of the principles of the language prefixed to that work, unquestionably led the way to the invention of Phonography.

It was with great surprise that we received tidings of

Isaac's marriage, while he was at Barton, to the widow of Mr. George Holgate, a lady of nearly twice his age. Mr. Holgate was the leading lawyer of the place and a man of culture and high social standing. His wife was of good birth, of fair education, and possessed of a certain suavity of manners which at that period, more than now, distinguished the gentry from the trading classes. She possessed a life interest in a fortune of $25,000, which, during her life, yielded a sufficient income to meet the expenses of the household. A year after the marriage Isaac brought her to our Trowbridge home, and I well remember that we were all impressed with her lady-like speech, general bearing, and polished manners, as compared with the average deportment of our more Puritanical social stratum; but those older than I seemed to think there was little unity of feeling, either on the mental or spiritual plane, between Isaac and his chosen partner.

ISAAC PITMAN'S correction of the Bagster Comprehensive Bible, which just preceded the invention of Phonography, was probably one of the most laborious of literary labors ever voluntarily undertaken and faithfully executed, purely from "the love of use," to use his own favorite expression, and was quite characteristic of his studious, energetic, and unselfish nature. His custom had been, in his morning and evening reading of the Bible, to refer to every marginal parallel passage, and to scan critically the accompanying notes. In these studies he had discovered in the Bible he used, published by the British Bible Society, popularly supposed to be free from a single typographic error, numerous misprints and errors in the marginal references. These identical errors he found were, for the most part, repeated in the commentaries of Scott, Henry, and Adam Clarke, and, to his still greater surprise, he found many of them copied in Bagster's Comprehensive Bible. Isaac's corrections of the errors in the Bible Society's octave edition were sent to the Society's headquarters, in London, but were never acknowledged, though the corrections were availed of in subsequent editions. My brother then wrote to Mr. Samuel Bagster, senior member of the well-known Bagster's Bible publishing house, stating his discovery that many errors in the Bible Society's edition of the Scriptures were repeated in the Comprehensive, and added (Barton-on-Humber, October 15, 1835), "I have made it my custom, for two or three years, in my morning and evening reading of the Scriptures, to refer to every parallel place, and in some measure appreciate the value of the plan. If you would like to place a copy of your Bible under my care, to be considered your property, I

would make a constant and careful use of it, and give you the benefit of the corrections or mistakes that I may discover on reading it through."

Bagster's Comprehensive Bible, the standard work of Bible students, comprises the authorized version of the Scriptures and a compilation of the references and parallel passages from all preceding Bible commentators, arranged on each page in double columns of notes and parallel references. The compilation being made from the latest editions, their correctness was assumed, as it was considered too herculean a task to verify their individual accuracy.

Mr. Bagster acknowledged Isaac's letter with marked courtesy, saying that he contemplated issuing a new edition of the Comprehensive Bible, and would be glad if he could secure a revision of the entire annotations. A copy of the Comprehensive was dispatched to my brother by the first stage-coach, and in a few days, at his suggestion, another copy, divided into seven parts, stitched in paper covers, with untrimmed margins. In these parts, which lay conveniently on the table during examination, the errors that were discovered were written, and as each part was completed it was returned to the London publisher. During the next three years almost every moment of Isaac's long days, not devoted to the school or required for special duties, was spent in the examination and revision of the four thousand notes, the five hundred thousand parallel passages, the extended chronological tables, and the tables of weights, measures, and coins. Many an hour did Henry and I sit at the same table, morning and evening, quietly reading, or scanning our lessons, while Isaac was "at work on his Bible."

For the purpose of speedy reference and examination, my brother used a copy of Bagster's small, thin octavo polyglot Bible, in which he had arranged a series of narrow paper strips, pasted in at the back of the book, and projecting half an inch from the front margin. These strips, arranged one under the other, were inserted from the top front down towards the back, at the bottom of the book. On each strip was written the book, chapter, and verse at which that particular opening of two pages began and ended. Such was the facility with which Isaac could refer to any passage in the Old or New Testament, that an uninterrupted glide of the thumb and fingers would enable him to turn the

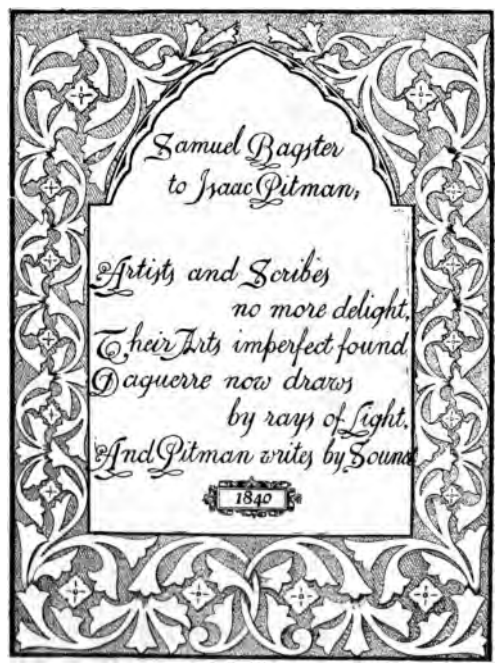
leaves of the already open polyglot, which lay upon the open pages of the Comprehensive, and place his index finger on any required verse. He would, after a quick glance, seize the strip which was nearest the required passage with his thumb and second finger, thus opening the book and turning the pages to the left. If the required passage was not found at the opening, the remaining fingers would slide one, two, or more to the right hand pages, until the required chapter and verse were in view, the forefinger still continuing its quick glide until it rested on the passage of which he was in search.

The corrections and additions made in the entire work were numbered by the thousand. Mr. Bagster generously offered to pay any sum Isaac might designate for his services, but he would accept nothing. Generous, enthusiastic soul, he considered the study and discipline which the examination had given him a sufficient reward! Mr. Bagster, during the remainder of his life, had a sincere respect for my brother, and when the corrected edition of the Comprehensive was issued from the press, a special copy, with extra margin, superbly bound, with silver plate inscription and inclosed in a beautiful casket, was sent the indefatigable corrector.

On beginning the revision of the Comprehensive Bible, Isaac calculated that by giving daily a certain number of hours, seven days in the week,—which, with his methodical life, he could confidently venture to promise himself to do,—he could complete the revision in three years. The work, undertaken in the latter part of October, 1835, was finished in August, 1838, a month or two earlier than he had assigned for its completion. He gave at least five thousand hours of the closest mental and physical application to this revision. It was religiously perused every day in the week and every week in the year. A holiday, as far as I remember, was never taken, and if an occasional interruption occurred by the stress of an unexpected duty, the lost time was made up by extra work on the following days. On its completion he would not lessen the satisfaction he had derived from his work by accepting any pecuniary reward. I remember his saying to a friend, who expressed great surprise that he had received no payment for his long-continued service, "I offered to do the work freely, and, of course, I would not now accept anything for it; it has been great satisfaction and a benefit to

me; but now, when I want to give my whole attention to my phonetic Shorthand, I am only too grateful that it is completed."

I can vividly recall my school days at this period, when I lived in my brother's family at Wotton-under-Edge, and though now sixty-five years ago, well do I remember how exceedingly hard his Bible revision became towards its close, for it was at this period that the phonographic idea had taken lodgment in Isaac's brain, and we talked of nothing else on our way to and from school, and in our occasional morning walks, and intense was the joy of my brother at the completion of his long task and the opportunity it afforded him to give his time and thoughts, as well as his heart, to new ideas in the field of experiment and usefulness then opening up to him.



AFTER four years' residence and school teaching at Barton, Isaac Pitman removed to Wotton-under-Edge, in Gloucestershire. His brother Jacob had married, and settled in that beautiful county of hills and dales. Jacob's wife had been a governess in a ladies' seminary, and was, in many ways, qualified to carry out her ambition to establish and conduct a young ladies' boarding school of her own. It happened that an uncle of the lady owned a very charming homestead at North Nibley, Gloucestershire, containing several acres of lawn, garden, orchard and meadow, which he offered to lease to the young couple, at a nominal rent, on condition of their settling near him. The offer was gladly accepted, and Jacob and his wife were able to carry out their ideal program. The recollection of their rural paradise, and the many Saturday holidays my brother Henry and I spent there during our school-days with Isaac, with a three-mile walk over country roads that had no single foot of level ground, are among the joyous remembrances I recall of my boyhood. The wish to be near his brother, and the desire to escape the severe and piercing climate of Barton, with its northern sea breeze, which was giving Isaac frequent coughs and colds, together with the offer of a school at Wotton-under-Edge, three miles from Nibley, were sufficient reasons for Isaac's removal to the more congenial clime and lovely scenic features of that portion of Gloucestershire.

Isaac had not been settled at Wotton-under-Edge more than a year, when an incident occurred which changed his religious views, and, probably, the entire religious aspect of his life. On a stage-coach he had for a traveling companion, Mr. J. K. Bragge, of Clifton. This gentleman, on discovering that his companion was much inclined to gravity and studious reflection, and more engrossed by a book than by the scenery through which they were passing, inquired, at an opportune moment, if he had ever read any of the writings of Emanuel Swedenborg. Isaac knew only the name, but admitted that he had imbibed certain prejudices against the mystic writer from what Wesley had written of him. The conversation during the ride of several hours was sufficient to interest my brother in the new doctrines. A package of Swedenborg's works, formidable quartos, original editions, I remember, was in a few days forwarded to my brother by his friendly acquaintance, and a correspondence of great length ensued, with the final result that Isaac became an ardent receiver of the doctrines and teachings of the Swedish seer. In a letter from Isaac Pitman, inserted in the "Intellectual Repository," 1837, he thus states his convictions: "I consider the view I have of the spiritual world, of the internal sense of God's holy word, and of the person of the Lord and Saviour ('The Almighty,' Rev. 1, 8, etc.), with which I have become acquainted through the writings of the New Church, as similiar to that arising from a curtain being raised, and I am now able to see, as it were, an ocean of light."

The change in Isaac's religious views occasioned much comment, misapprehension and harsh judgment in the Methodist community to which he was attached, and in which, as at Barton, he had been an earnest worker, itinerant preacher, and class leader. Isaac's enlightenment and spiritual growth, as he regarded it, was, by his religious friends, interpreted as spiritual backsliding, and he was disciplined accordingly. He was cited to appear before the trustees of the church to answer the charge of heresy. The presiding elder of the district was an active little man, named Barbour. The name recurs to me at this moment, seemingly for the first time since the event, which took place more than sixty-five years ago. I was present on one of the three evenings devoted to the religious investigation. After the evening wrangle was over, I remember asking my brother, in

my simplicity, "What makes Mr. Barbour so cross?" "Mr. Barbour is not angry," my brother replied, with a smile, "he is only very earnest to make it appear that he is in the right and that I am in the wrong, but I think I am fortunate in seeing things differently." The elders of the church, finding that Isaac could not be reclaimed, suspended his work in the church and ultimately expelled him. Some of the more narrow-minded of the congregation, who were our former friends, made us feel that heresy was not respectable, but an offense to be met with snubs and slights; Isaac did not seem to feel it in that way, but his wife, Henry and I were often made uncomfortable by the rebuffs and insinuations of our former friends; but these little persecutions were, perhaps, more than offset by the cordial sympathy of new friends among the liberal-minded people of the town and neighborhood. The family henceforward, during Isaac's stay at Wotton-under-Edge, attended the Episcopal church, the rector of which, Mr. Perkins, a genial and scholarly gentleman, though feeling no attraction for Isaac's religious views, showed much respect and kindly feeling for him because of the rancorous persecution he had endured. The religious ferment did not stop with the church. The trustees of Isaac's school took up the matter, and decided that they could not longer regard him as a fitting instructor of the public school. This decision proved fortunate for my brother, who, had he possessed a grain of worldly shrewdness, would, before this, have "expelled" himself and opened a private school for the children of the middle and professional class, which he now proceeded to do, for there was great need in the town for such a school. The only one in the place was the Free Grammar School, in which twenty youths, sons of the trades-people, clad in university caps and flowing black gowns of the finest West-of-England cloth, renewed annually, were instructed in the classics, and little else. This school was an example of England's endowed institutions for the education of a limited number of boys, where the income from the original gift had so much increased by the growth of population and commerce, that the trustees were troubled to devise means for its expenditure. To expand the school by increasing the number of its beneficiaries, would be the suggestion of ordinary common sense, but from the British, conservative point of view this would have been revolutionary and

unconstitutional! Isaac's school proved a success from the start, and yielded a larger income than the position he had been forced to resign.

Before my brother had decided to what Christian ministration he would temporarily attach himself, he chanced to be present at the Congregational church in the town, which was founded nearly a century ago, by Roland Hill, a dissenting minister of celebrity, who was remarkable for his eloquence and eccentricities, rather than for devotional fervor or erudition. On the occasion referred to, the minister made religious heresy a leading feature of his discourse, and said that among the unpardonable heresies--of course from his Congregational point of view—were denial of the Trinity and the Atonement, and added, that if he himself held such unscriptural views as he had described (and somewhat misrepresented), he should expect to be hunted out of the town like a mad dog! Here was an instance of the stricken deer, religiously viewed, seeking sanctuary, and the ecclesiastical hunter availing himself of the chance to inflict an additional wound!

Another step in Isaac's development took place while living at Wotton-under-Edge. He became a vegetarian, not for religious, but humanitarian and physiological reasons. After his acceptance of the New Church doctrines, he gradually outgrew his extreme ascetic notions. He no longer fasted nor recommended it, and, judging by his countenance, a certain pious gravity which before marked his features,—probably an expression due to the mists and clouds of his religious belief,—gave way to placidity and not unfrequent gleams of facial sunshine. He had become acquainted with a singular family, living a few miles from Wotton-under-Edge, consisting of two maiden sisters, somewhat past middle life. They were people of intelligence and wealth, and their country seat, Ebworth Park, was of great extent and beauty. They lived quiet, useful and charitable lives, and were noted among the country people for the simplicity of their manners and their mystic faith; but their crowning oddity was, "they would not eat meat!" That people rich enough to buy flesh meat would not eat it, was deemed unaccountable in rational folk, and probably was the only mysticism about these sweet and remarkable people. It must have been shortly after Isaac's first acquaintance with this family that an

incident occurred which led to his instantaneous conversion to vegetarianism. A live chicken had been sent to the house, which was to be served for dinner. The housekeeper, an old and valued servant of the family, who had been brought by Mrs. Pitman all the way from their Lincolnshire home, would have "nothing to do with killing fowls; no indeed!" She was an example of the old style of domestic servant, always yielding most faithful and willing obedience in the line of recognized duty, but sturdily independent outside of that limit. An appeal was then made to Isaac to undertake the duty, on which he and I descended to the area, a small stone-paved yard, on a level with the basement kitchen. Isaac, hatchet in hand, laid the victim's head on the block, and a cruel blow struck off what Isaac regarded as the seat of life in the bird; but as the chicken's brains are not all in the skull, the headless bird, escaping from his grasp, fluttered excitedly all round the area. This was so unexpected and shocking a sight that the bird had to be caught and a little more of its head chopped off. To a nature as sensitive as Isaac's, this experience was sufficient to make him instantly resolve that, henceforth, he would neither sacrifice life nor partake of the body when sacrificed—a resolution adhered to for the remaining sixty years of his life.

Of the rigid abstemiousness and fasting which distinguished Isaac's life at Barton, I know only from the talk of the family, and from our home practice of a Friday's fast, which Isaac, while at Barton, induced father and mother to adopt, and in which we children, I fear, unwillingly participated. But at Wotton-under-Edge we knew nothing of it. We ate each day three meals of savory food, more varied and delicately prepared than we boys had been accustomed to at home, but after the chicken incident neither Isaac, Henry nor I ate anything for which life had to be sacrificed. Mrs. Pitman and Hannah, our housekeeper, continued to eat meat, and to take their tea and coffee. Isaac, Henry, and I, for breakfast and tea, the last meal of the day, drank only sweetened hot water and milk. Isaac, I believe, was considerably past sixty years of age before he indulged in tea or coffee. It was with a surprised smile I received the news, when he was between sixty and seventy, that his custom was, at early rising, to prepare a cup of coffee over a spirit lamp in his bedroom, and partake of it before commencing his day's work.

Isaac Pitman's reception of the New Church doctrines (1836-7), his expulsion from the Methodist church, and his coincident expulsion from the mastership of the public school, were the factors that, primarily, led to his future specific career. The establishment of his private school, attended, as before intimated, by the children of a higher social and intellectual grade than those he had previously taught, led to his teaching Shorthand to a class of his more advanced boys. My brother probably never thought of teaching the art to the children who attended the public school, but he no sooner began instructing pupils to whom Shorthand might be useful, than he gladly availed himself of the opportunity of including it among the regular branches of study. The introduction of the art into the school, and my brother's earnest desire to see Shorthand more generally practised, induced him to prepare a small treatise, explanatory of Taylor's system, which both he and I used, sufficient for self-instruction, and which he thought might be sold at the low price of threepence. When the manuscript was completed, he sent it to Mr. Samuel Bagster, asking if he could arrange for its London publication. Nothing could more clearly show the respect in which my brother was held by this gentleman, the head of one of the leading and most exclusive publishing houses of London, than his instant and friendly compliance, accompanied by the suggestion that the little work should bear the imprint of their establishment. Mr. Bagster, however, with a publisher's instinct, submitted the manuscript to a professional reporter, who, after examining it, shrewdly wrote, "The system Mr. Pitman has sent is already in the market. If he will compile a new system, I think he will be more likely to succeed in his object to popularize Shorthand." Teaching the art to a class of boys had proved an effectual eye-opener to the imperfections and shortcomings of what was then regarded as the best system of Shorthand known, and no sooner had Isaac received the practical advice which accompanied the returned manuscript, than he resolutely set to work to improve on Taylor. And now came the opportunity to use his knowledge of what were the actual elements of the language, which he had gained by his diligent study of Walker's Dictionary. Previous authors of Shorthand said, "Write by sound, drop silent and useless letters;" but the Roman alphabet, on which all the old systems were based, did not afford the means of so doing, in that there were many sounds in

the language for which no Shorthand signs were provided. Isaac's first improvement was to pair the consonants *p b, t d, f v*, etc., representing the pair by like signs, but using a light stroke for the first or whispered sound, and a slightly heavier or shaded stroke for the corresponding vocal sound. Signs were also provided for *sh* as in *fish*, *zh* as in *measure*, *th* as in *bathe*, as distinct from *th* in *bath*; also for *ng* in *hang*, as distinct from that in *hinge* etc.; for none of which sounds had signs been provided in previous Shorthand schemes. A new, extended, and sequential scheme of vowels took the place of the old and imperfect *a, e, i, o, u* arrangement of the Roman alphabet; that is, the new system did what any consistent alphabet must do—provided signs for all the vowels of the language as shown in the following table:

˙|	*ee* as in *meet;*	|	*i* as in *mit;*
·|	*a* as in *mate;*	·|	*e* as in *met;*
.|	*ah* as in *father;*	.|	*a* as in *fat;*
¯|	*au* as in *naught;*	¯|	*o* as in *not;*
-|	*o* as in *note;*	-|	*u* as in *nut;*
_|	*oo* as in *food;*	_|	*oo* as in *foot.*

In addition to these simple vowels, signs were provided for the diphthongs, *i* as in *fight*, *oi* as in *boy*, *ow* as in *cow*, and *u* as in *beauty* as distinct from that in *but.*

How ludicrous, from the phonographer's standpoint, seems the rule laid down in the old systems of Shorthand, "Write by sound," when the glaring insufficiency of their alphabets is compared with the scheme which Isaac Pitman first suggested in his little treatise which was ushered into the world under the title of "Stenographic Soundhand." But the strange hesitancy with which the phonetic principle was at first accepted by the author, and his failure to appreciate the importance of a completed vowel scale, and especially the pairing of the consonants, is curiously shown by the fact that in his first published scheme the consonants of his enlarged and systematic alphabet were not presented phonetically, but alphabetically, in Romanic disorder, *b, d, f, g*, etc., thus making concession to custom and general ignorance, and in a great measure concealing the philosophical order he had discovered and, naturally, would have been proud to display.

ISAAC PITMAN'S first attempt to improve and popularize Shorthand, and to realize his wish to bring it within the reach of every schoolboy, was the publication of his "Stenographic Soundhand" in 1837, the price of which was fourpence. Before that time, with the exception of a pirated edition of Taylor's system, which was sold for three shillings and sixpence, there had been no leading system of Shorthand issued in England at less than half a guinea or nearly three dollars. Isaac's booklet consisted of two pages of engraving and twelve pages of letter press. Three thousand copies were printed, but it scarcely paid its expenses, for most copies were given away. It was a very unpretentious effort at book-making. The twelve explanatory pages, without even a title page, were placed inside the double-page engraving and stitched in a dull blue "bonnet-board" cover, on the outside of which a white label was pasted containing the title:

STENOGRAPHIC SOUNDHAND,

By ISAAC PITMAN,

LONDON.

SAMUEL BAGSTER,

At his Warehouse for Bibles, Testaments, Prayer Books,
Lexicons, etc., in Ancient and Modern Languages,

No. 15 Paternoster Row.

Also Sold by the Author, Wotton-under-Edge,
and by all booksellers.

Price, fourpence.

This literary bantling, in its uncouth dress, the stitching and label-pasting of which were done by us boys in his school, was so utterly unlike anything else sold in the aristocratic establishment of Samuel Bagster, that no wonder many stories were told, by inquirers for the little book, of the undisguised contempt with

which the clerks in the store treated the literary waif. But these scornful young men probably did not know that Isaac Pitman had earned respectful consideration from their firm, by years of gratuitous labor, in correcting their fine and costly Comprehensive Bible, the special publication, which, more than any other, gave character and prestige to their establishment; still less did they imagine that this despised little scraplet was the forerunner of a great national benefaction; that they might even live to see the time when millions of Phonographic instruction books would have been sold and studied; that the art would spread and be used wherever the English language was spoken; that tens of thousands of intelligent people would make a daily use of it, and tens of thousands more would earn their living by its daily practise; that in the distant future the Queen of the realm would recognize its utility, and confer the honor of Knighthood on its inventor; still less could they imagine that the time would ever come when this attempt to improve Shorthand would become so interwoven into the daily commercial, literary, legal, and political work of the world that, were it, by any possibility, withheld from use, even for a single day, the progress of civilization would be grievously hindered.

After nearly three years of constant experimenting, in which he habitually conferred with me, and teaching the system to about twenty of the more advanced boys in his academy at Wotton-under-Edge, where I was his assistant, and afterwards at Bath, to which city Isaac removed in the summer of 1839, the new, enlarged, and more complete system was published, under the title of Phonography. The scheme was first presented on an elaborately engraved steel plate, the price of which was one penny. But the enthusiasm of the author did not stop here. The margin of the engraved sheet contained the offer: "Any person may receive lessons from the author, by post, gratuitously. Each lesson must be enclosed in a paid letter. The pupil can write about a dozen verses from the Bible, leaving spaces between the lines for the corrections." The self-sacrificing spirit of Isaac Pitman's career as author, teacher, editor, lithographic-transfer writer, typic experimenter, printer, and publisher,—and, in justice to his varied labors and industry, it should be borne in mind that the aptitude necessary to insure success in each phase of his phonetic labors was distinct, one from the other,—is probably without parallel,

in literary or inventive history. In an analysis of my brother's controlling motive, it is difficult to determine whether altruism, enthusiasm, the assumption of a special mission, or the natural impulse of an inventive mind, was the leading incentive in carrying him through his sixty years of unremitting labor, thirty years of which were spent under the benumbing influences of restricted means, akin to actual poverty.

The improved Phonography was ushered into existence in January, 1840, as twin sister to England's new Penny Postal Law. The agitation for cheap postage throughout Great Britain began soon after the publication of Stenographic Soundhand. It was in 1837 that Roland Hill's pamphlet appeared, urging the practicability and advantages of a uniform penny rate of postage throughout Great Britain, on letters under half an ounce. The abiding hope and faith that this beneficent project would be successful determined the form of publication for the new and improved scheme of Phonography, and though its publication was delayed some months, waiting for the passage of the postal law, when the act was passed and the author was able to send his whole system, together with explanatory and recommendatory notices, to any part of the Kingdom for one penny, he availed himself of its privileges with the greatest industry. One of his first efforts to bring his new scheme into notice was sending six copies of his plate to every school teacher in Gloucestershire and Somersetshire, begging the recipient to accept one and distribute the remaining copies to such as would be likely to be interested in the study of Shorthand.

The present generation, who have grown accustomed to the privilege and necessity of cheap postage, and who can now send a letter of double the weight of the English limit, and ten times the distance possible in the British Isles, for a "penny," will be interested by the reminder that, little more than half a century ago, the average postage on a single letter was nearly twenty cents. A "single" letter had to be written on one sheet, without regard to its size, but any inclosure, however trifling, doubled the postage. Envelopes were unknown. I very distinctly remember that the letters of my brother Isaac, that reached home from Barton-on-Humber, were uniformly written, with great minuteness and care, on the largest sized sheets of folded foolscap paper, and it is on record that one of his letters to a friend, on a contro-

versial subject, contained more words than the entire Gospel of Matthew. When cheap postage was first agitated, so utopian did the project appear to Lord Lichfield, then Postmaster-General, that he declared "that of all visionary schemes he had ever heard, this was the most extravagant." The Duke of Wellington scouted the proposed reduction of postal charges as "undesirable and absurd." To effectually carry out the new postal scheme, the government offered a prize of two hundred pounds for the best method of collecting the pence for the prepaid letters. My brother was one of the competitors, and his practical mind suggested the very device that experience has shown to be best. His proposition ran: "Let plates be engraved in small squares of an inch space, the plates being twenty inches by twelve, making 240 squares, the price of which, at one penny a stamp when struck off on paper, will be one pound. The stamps will become equivalent to the current coin of the realm, and remittances of small amounts might be made in them." He further recommended,—and this was the unlucky stroke of economy that proved his undoing,—that the stamps be used for sealing the letters or envelope. The inconvenience of cancelling the stamp, when affixed at the back of the letter, gave the much coveted prize to another competitor, who repeated Isaac's idea, but with the suggestion that the stamps be affixed on the face of the letter, at the upper right hand corner, as is the convenient practise of today.

An added and personal interest is attached to the beneficent labors of the great postal reformer, Sir Roland Hill, from the fact that his father, Thomas Wright Hill, who had been the head of a large private academy at Tottenham, in which his son Roland had been his assistant, was an ardent friend of the Phonetic reform. At the termination of a four months' course of teaching by my brother Joseph and myself, in Birmingham, in 1844, a public phonographic festival was held, at which Thomas Wright Hill presided, and made an admirable address, in which, speaking as a lifelong educator, he strongly urged the necessity and importance of a reform of English spelling, regarding it less as an innovation than a restoration, which would prove of immense educational value. Isaac Pitman was present at the festive gathering, and publicly congratulated his brothers on the result of their labors in Birmingham, where, by four months' instruction, many hundreds of intelligent people had become enthusiastic phonographers.

The phonetic system of writing, developed mainly through the labors of Isaac Pitman, may be regarded both as a discovery and an invention. While no claim can be made that he was the discoverer of the true principles of alphabetic representation, or was sole contriver of the first philosophic scheme of brief writing, it is, however, quite fair to claim that his sixty years of assiduous labor brought system and order out of the previously existing chaos; and that he originated and pioneered the movement that gave to the English-speaking race its first practical scheme of philosophic Shorthand; and that he labored with more untiring devotion to pave the way for the introduction of a rational, typic orthography than any who had preceded him. Phonetics as a science, and Phonetic Shorthand and Phonotypy as arts, had only an embryotic existence prior to the labors of Isaac Pitman. A volume might be filled with a narrative of attempts to construct Stenographic systems of writing, which, judged by the knowledge and requirements of today, would be a record of deficiencies and inconsistencies that would be interesting chiefly as showing their shortcomings and crudities. These schemes had their use in preparing the way for Phonography, but they were, without exception, so insufficient as schemes of alphabetic writing, and so inadequate and complex as a means of verbatim reporting, that only those of exceptional endowment, great perseverance and extraordinary memory could so far master their difficulties and shortcomings as to make practical use of any of them. Another record might show the attempts that have been made towards a true alphabetic standard as applied to the printed language. This would be a narrative of imperfect investigations, incorrect conclusions, and a strange disregard of the demands of the scholar and the practical requirements ot the typemaker, the printer, and the reader. These attempts at alphabetic reform were however of great value, but they were suggestions rather than completed schemes, and as substitutes for the existing method were far too imperfect to be generally accepted and too unphilosophic to survive.

Isaac Pitman was the first to devise a practical scheme of writing based upon a natural classification of the elementary sounds of language, using for their representation the briefest geometric signs that were in natural correspondence with the sounds they were employed to represent. His scheme was the

first that was philosophic, facile, and brief. He was the first to recognize and harmonize the natural laws of language, and of graphic forms best adapted for their visual representation; that is, in recognizing the correspondence between classes and groups of sounds, and the geometric signs that, naturally, would most appropriately represent them on paper. He was first to recognize that the organs of speech were products of nature, and could not be changed, and that geometric lines were entities that could not be altered or increased, but that human language was artificial, being a product of civilization; therefore there was a point at which a strictly philosophic correspondence between signs and sounds must yield to expediency—that is, to the necessities of the English language in particular. How appropriately and admirably this necessity is met, is known to every phonographer. Like sounds are represented by like signs, as far as practicable; the briefest signs are used to represent the most frequent sounds, and less facile signs are used for the representation of rarer sounds. Phonography is unlike and superior to any previous system of Shorthand, in that it was the first to recognize and respect the linguistic and grammatical construction of the language, by providing not only for its single, but for its double and treble consonants, and its groups of sounds, used in its frequently-recurring consonantal combinations, all of which are provided for, according to their relative frequency, by a scheme of easily-written appendages,—consisting of circles, hooks, and loops,— so that two, three, four, and even ten and eleven, consonants can be expressed with distinctness by a single inflection of the pen. Systems of Shorthand, previous to Phonography, provided only a set of signs adapted to the consonants of the Roman alphabet, and with that they stopped, and any systematic scheme of initial and final appendages to meet the requirements of the language, such as is so admirably worked out in Phonography, was quite unknown. To stop short with an alphabet that provided little beyond substitutes for the consonants of the alphabet, was found adequate to the representation of but a fraction of the simpler words of the language. Difficult and oft-recurring words were provided for by symbolic or arbitrary marks or contractions, which had to be constantly augmented by the reporter to meet the deficiencies of his stenographic scheme The notes of a reporter would, of course, be illegible to all save to

the writer himself, and the transcription of his notes by another, as is now so frequently done, was a convenience unknown prior to the invention of Phonography.

The geometric forms that are available as signs for sounds, consist only of a right line and a curve, the latter struck in an evolute and an involute direction, and to be entirely legible they can be used in only a very limited number of directions, namely, as a horizontal, a vertical, and an oblique line to the right and left, midway between an upright and a horizontal line. But the inventor of Phonography found that, in actual practise, a stroke a full eighth of an inch in length,—the normal or standard size,—could, without danger of illegibility, be made half-length and also double-length, when used to represent an added sound or sounds with which the primary sound naturally and customarily combined. The available stenographic material furnished by a right and a curved line was thus invested with a three-fold power. It was also found that the signs had a two-fold value when made light, and when shaded, that is, slightly thickened. This fact was availed of by the inventor to distinguish the two classes of consonant sounds, the light strokes being used to represent whispered consonants, and the shaded signs to indicate their corresponding voiced sounds. The two classes of signs, right lines and curves, were employed with nice discrimination, in that the inventor used straight lines to represent the *explosive* sounds, as *p*, *t*, *ch*, *k*, etc., and when shaded, their corresponding vocals, *b*, *d*, *j*, *g*, etc.;

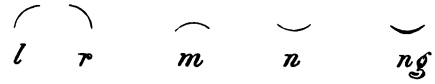
p b *t d* *ch j* *k* *g*

The curves were employed with equal uniformity to represent the *continuant* sounds;

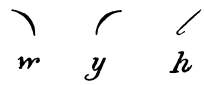
f v *th* TH *s z* *sh zh*

With these sounds the regular pairing of consonants, as whispers and vocals, stops; and coincidentally a regular pairing of available signs is exhausted; this, therefore, is the point at which philosophic order yields to expediency, and to the special requirements of English speech. *L*, *r*, *m*, *n*, and *ng*, have no

corresponding whispered sounds in English, but being of frequent occurence, are represented by the facile and convenient signs;



The coalescents, *w* and *y*, are sounds ranking midway between vowels and consonants, being more obstructed than vowels and less so than consonants. Being vocal sounds they are represented by the shaded signs;

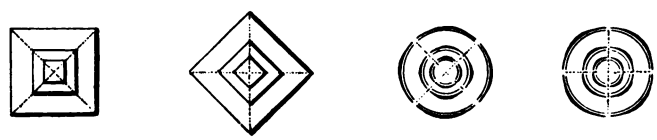


The aspirate *h*, an unobstructed, audible whisper, is heard in English speech preceding any and all of the vowels, as well as the coalescents *w* and *y*. Its actual sound depends on the vowel it precedes, for it is an audible breathing through the *position* of the vocal organs assumed to pronounce the vowel or coalescent that follows it. Though less of a sound than a vowel, it needs a stroke or consonantal representation, as it is frequently used both preceded and followed by one or more vowels, (as in Ohio), and no other simpler or more convenient sign remains than *h* ⟋.

A brief and philosophic Stenography, as to its consonants, is thus based on the employment of

1. Straight and Curved Lines,
2. Light and Shaded,
3. Of Three Lengths,
4. Written in Three Positions, with respect to the base line, struck in Horizontal, Vertical, and two Oblique directions.

These signs are derived from the Square and Circle, shown in the following diagrams, which give all the geometrical signs that are practical for brief, legible, and facile writing.



The middle lines in the diagrams show the relative length

of the phonographic letters, the double and half-lengths being used to represent added sounds.

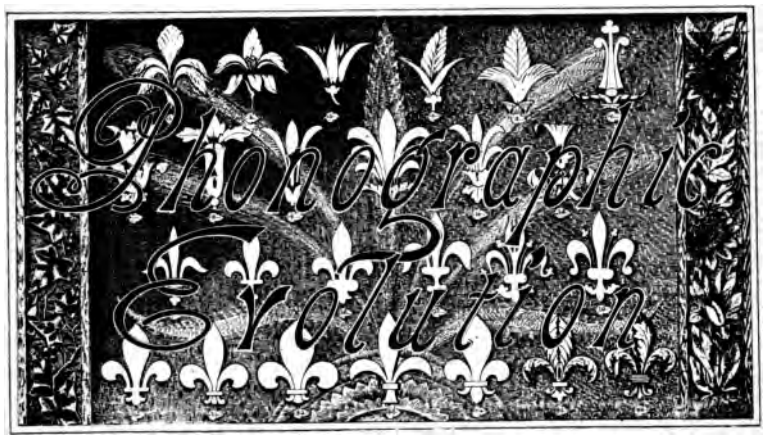
The following diagram shows that each simple character may have an initial and a final hook; each character also admits, as an appendage, an initial and final circle, loop, and an enlarged hook. Each sign has a three-fold value according to its length, and a three-fold value as to its position with reference to the base line of writing.

It will be thus seen that the elementary *sounds* of language being discovered, classified, and named, the problem was the most practicable *adaptation of signs* for their representation, having reference to the nature of the sounds and their relative frequency in speech. These were the problems that Isaac Pitman and his army of coadjutors, the wide world over, helped to work out in sixty years of experimenting.

The tables following ~~this~~ chapter are illustrations of the three stages of phonographic evolution; showing the "Stenographic Sound-Hand" of 1837; the fuller, but incomplete, and, from to-day's standpoint, the mistaken development of "Phonography" of 1840, and the fully developed "Phonography" of today.

Those who are familiar with the history of Shorthand, from the days of Elizabeth, will see in Isaac Pitman's first scheme a great improvement upon previous systems of brief writing, while those whose judgment of what a philosophic Shorthand should be is based upon a knowledge of the comparatively perfect Phonography of today, will be amazed and amused at the crudity of the author's first embryotic attempt.

It is a curious incident in Stenographic history, that the exact order of Isaac Pitman's simple-vowel scheme, and to a great extent the pairing of the consonants, was anticipated in one system of Shorthand, namely, that by Holdsworth and Aldridge, joint authors of "Natural Shorthand," published in 1766. Isaac Pitman was unaware of the existence of this system, and did not become acquainted with it till many years after he had re-discovered the natural order as well as the best representation of the sounds of speech, as presented in Phonography. We have special reason for referring to this interesting system, because we ourselves did scant justice to the authors in our "History of Shorthand" (1857). At that time we had not seen a copy of the rare and beautifully-engraved original work, and wrote from information received second-hand. It was the first brief system of writing in which the phonetic principle and a full alphabet were recognized; but as a practical Shorthand, it was an entire failure, in consequence of the ill-adaptation of signs to represent the sounds of the language, and its failure to provide for the double and treble consonants, and the frequently recurring initial and terminal sounds peculiar to English speech, all of which are so fully and conveniently represented in the Phonographic scheme.



AN intelligent person, on commencing the study of Phonography, is likely to experience a lively sense of admiration on discovering how seemingly perfect is its adaptation of the simplest signs to the representation of sounds, how admirable and facile are its abbreviating appendages of hooks, circles, and loops, and how eminently reasonable seems to be the use to which every stroke is applied. It may be said that geometrical *lines*, such as are employed in Phonography, have no actual relation to the *sounds* of speech, any more than they have to storms or clouds. Storms and clouds may, indeed, be suggestively indicated by lines; but *sounds* are things that can neither be seen nor felt, and we recognize their momentary existence only when they reach the brain through the ear. When, however, we realize the possibility of using dots, lines, and curves, which, by correlative agreement, may be made to stand for and recall certain sounds, we find ourselves in possession of a means by which spoken words may be represented to the eye, and by which they can be perpetuated and transmitted from one person to another, even when widely separated by time or space. Words, formulated as thoughts, may, it is true, be pictorially represented. This was the primitive method adopted by all semi-civilized peoples, and is, in reality, the only direct mode of visualizing thought. We might, for example, picture the thought conveyed in the words, "The Highland shepherd, on the bleak hills, is watching his flock," and a pictorial representation might record the thought; but the picture would not convey this or any precise form of words; and there are innumerable thoughts and facts which may be expressed in

words, that could not be pictorially or symbolically represented; hence, the importance and necessity of some means of recording facts, ideas, and emotions by picturing the *words* employed for their vocal expression.

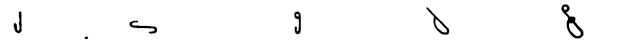
Writing, in the present stage of civilization, is as necessary and important as speech. To answer the needs of the present time it must be legible and brief. Now reason shows and experience proves that the best possible forms for a facile and legible representation of consonant sounds are short right lines and slightly bent curves. These are the best, because they are the briefest to write and the most readily distinguished when written, and it is impossible to conceive of any other forms that would as well answer the required conditions. And it is a fortunate coincidence that there are just as many of these signs, when made light and shaded, as are needed to represent the consonant sounds of our language. The unobstructed voiced sounds, known as vowels, form a separate and distinct class of sounds. In the Roman alphabet not one-half of those heard in English speech are provided for by the letters *a, e, i, o, u.* There are at least twelve vowels or unobstructed sounds in English that must be represented, and they are found to admit of a natural arrangement, as orderly in their sequence as are the musical sounds of the major scale of music. These sounds are heard both long and short, a distinction easily recognized on pronouncing the words *caught, cot; fool, full;* etc. These unobstructed vocals admit of prolongation, as when words are made emphatic. The negative *no* is doubly emphasized by lengthening the vowel. Othello's self-condemnation, "Fool, fool, fool!" would be robbed of its appealing force if the vowel were not prolonged. The vowels are the sounds that make, with proper tone, force, and modulation, the music, melody, and effectiveness of speech, and are in this respect wholly unlike the contacts, explosive, hissing, buzzing, or trilling emissions of breath producing the consonants, and which so distinctly modify and emphasize the vowels they precede or follow. The essential difference between these two classes of sounds is indicated in Phonography by a representation equally distinct and characteristic, the consonants being represented by straight lines and curves, the vowels by detached dots and dashes, that are made light for short vowels, and shaded to indicate the longer sounds.

When attention is directed to human speech, what, on first thought, could seem so difficult of analysis, more undefinable and complex, or less subject to rule or law, than the rapid *motion* of the lips, teeth, and tongue, as they check, variously modify, prolong, or shorten the audibly expired breath, which, either whispered or vocalized—that is, with or without a vibration of the vocal cords—makes speech? If it had not been done, how futile would seem any attempt to reduce to their elements the gliding, complex stream of articulated and vocalized breath that is heard even in deliberate conversation! The classification and nomenclature of sounds of widely differing quality would seem a like impossible task. No wonder, then, that we find, even among those who have given years of special thought to the subject, essential differences of opinion as to what are the actual elements that are heard in certain classes of words, while intelligent people, who have not made a special study of the subject, have very confused ideas of the sounds they use in speech, and when they are asked to name the *sounds* heard in some simple word, say, for example, the word *think*, they seem incapable of realizing what are the vocal elements of the word apart from the *form* in which it meets the eye on the printed page, and their mental conception of the word *think*, will be confused with the sounds, or rather the *names*, heard when we say *tee-aitch-eye-en-kay;* but phoneticians know that not one of these letter-names is heard when we SAY *think!* Phonography, therefore, is not the writing of the conventional *spelling*, which is confusing and more or less irrational, but consists of writing the spoken word by signs that stand for the *sounds* which reach the ear when the word is distinctly pronounced, and of which the ordinary spelling, though a professed representation, is, in most cases, a misleading guide.

The sounds of speech, when reduced to their elements, are, in the Phonographic system, classified into groups, and pictured by signs that correspond to the nature and quality of the sounds they represent; and as each sign is allowed to stand for but one and always the same sound, there can be no hesitation in deciphering any given sign or combination when it thus distinctly appeals to the eye. Isaac Pitman was not the first to attempt an analysis and classification of the sounds of English speech. It had been imperfectly accomplished in Walker's

Pronouncing Dictionary, from which the author of Phonography obtained his first ideas; but he was the first to devise a scheme of brief and legible writing, based upon a philosophic theory of sounds, which secured to the writer the accuracy and certainty with which figures are used to represent *numbers*. He was the first to discover that the signs contained in the preceding diagrams, when light and shaded, were all that were needed to represent every consonant sound of human speech. He discovered certain elements of abbreviation, alike facile and legible, as that each phonographic sign, made of convenient length, might be shortened and lengthened with perfect legibility, thus

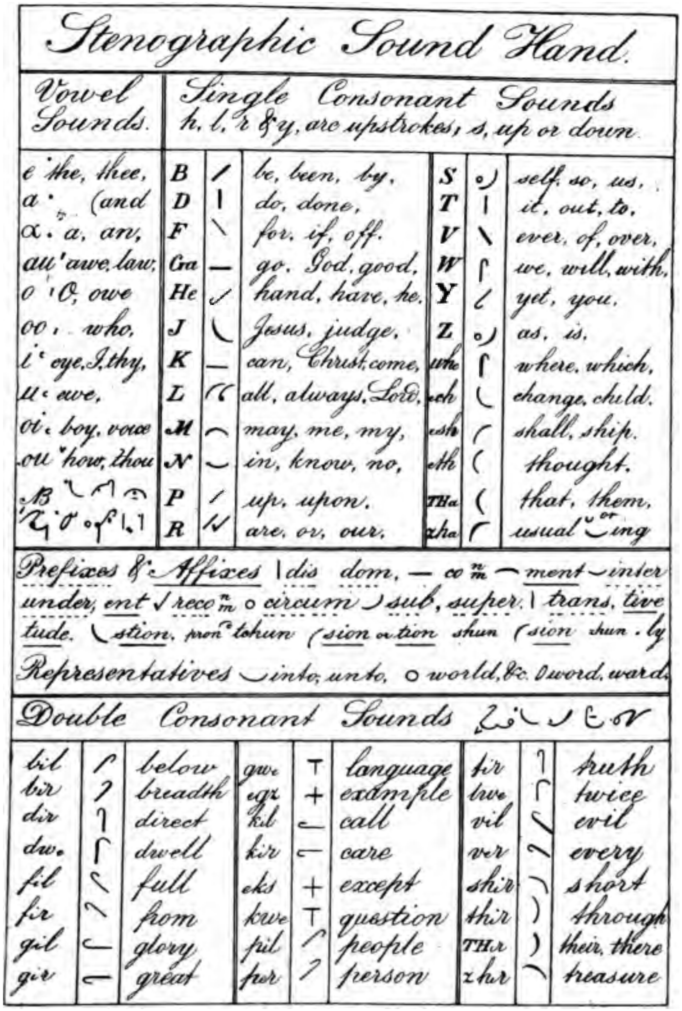
giving each sign a three-fold power. He discovered that small hooks, circles, and loops, at the beginning and end of these brief signs, could be employed to represent added sounds, terminals, and syllables, which could be as legibly represented by these abbreviated appendages as when written with the lengthier elementary signs, and that thus was secured a means of writing words with almost the ease and freedom with which they are spoken. How utterly unanticipated and incredible would it have seemed to the old school of stenographers could they have been told that all the consonants of the following words were fully expressed by the accompanying brief phonographic signs, where three, four, five, six and seven consonant sounds are written by an uninterrupted stroke of the pen!



tent *cleaned* *strand* *punster* *spinsters*

The principles of abbreviation and their systematic application were only very gradually evolved by years of patient experimenting on the part of the author and thousands of earnest students in all parts of the world, so that now, on examining the early editions of the system, one is surprised to find in what an imperfect and fragmentary manner these convenient and useful principles of abbreviation were at first recognized and applied. There is no more necessary abbreviation, for example, than that required for the final *t*, heard in the past tense of a numerous class of verbs, as *sip*, *pick*, *cash*, etc., and *d*, as heard in the past tense of *rib*, *bag*, *bathe*, etc., and there is no more beautiful principle of abbreviation in Phonography than that known as the halving principle, by which *T* or *D*, according as the letter is light or shaded, is added to the value of a consonant stroke by making it half its normal length. This necessity was not even recognized in Isaac Pitman's first published scheme, and only partially and not uniformly applied in the 1840 edition of Phonography. On one occasion, when instructing a class in Phonography, using the edition of 1843, I was explaining to what letters the halving principle was applied, and why it was not applied to other letters, the halved form of which represented other sounds than *t*, or *d*, when a lazy pupil said: "Why not apply the principle to *all* the letters and save us the trouble of memorizing the exceptions?" Why not, indeed! It took

years to establish this convenient improvement, it cost thousands of dollars in unsalable books, and gave rise to endless complaints and discontent on the part of those who, having learned the system, had to change their habit if they would conform to the rule of the progressives. In like manner, my brother Joseph was explaining to a class the principle on which the vowels in a word might be omitted and yet be indicated by *position*, without actually inserting them, when a pupil said; "If you omit the vowel, why not join the consonant outlines, and thus save the time and trouble of lifting the pen before starting for the next word?" Though the idea was not new, the complaint gave rise to a series of experiments that resulted in a distinct and abbreviated style of phonographic *phrase-writing*, which was first worked out, to a practical end, by my brother, Joseph Pitman, Mr. T. A. Reed, and myself, and proved to be a means by which a degree of brevity, quite unlooked-for on the part of the author, was obtained without any sacrifice of legibility. There are few, even among intelligent phonographers of the present day, who have other than a very imperfect idea of the vast amount of experimenting, discussion, inconvenience, and expense that have attended the evolution of Phonography. It might enhance the phonographer's interest in his favorite art if he recalled the fact that the forms he uses and the theory he accepts for the representation of speech,—seemingly so perfectly natural because it is so facile and convenient,—is but the culmination and fruition of a series of experiments, changes, and improvements which were commenced, not with Isaac Pitman, but in the very childhood of civilization, and which have been uninterruptedly continued to the present time. From the earliest pictorial and hieroglyphic symbols to the latest phonographic phraseography, it has been an unending series of experiments and improvements, and each step has been received with more or less of hesitancy and distrust, because of the inconvenience attending a change of habit. The development of Phonography affords another illustration of the general rule that the simplest, most convenient, and most reasonable way of doing anything is usually the last to come, but when the right thing is accepted, it seems amazing that the inferior and imperfect one should ever have been tolerated, much less loved and tenaciously adhered to.


Stenographic Sound Hand.
Vowel Sounds.
Single Consonant Sounds
h, l, r & y, are upstrokes; s, up or down.
e the, thee,
a (and
α a, an,
au awe, law,
o O, owe
oo who,
i eye, I, thy,
u ewe,
oi boy, voice
ou how, thou
B be, been, by,
D do, done,
F for, if, off.
Ga go, God, good,
He hand, have, he.
J Jesus, judge,
K can, Christ, come,
L all, always, Lord,
M may, me, my,
N in, know, no,
P up, upon.
R are, or, our.
S self, so, us,
T it, out, to,
V ever, of, over,
W we, will, with,
Y yet, you.
Z as, is,
wh where, which,
ch change, child.
sh shall, ship.
th thought.
THa that, them,
zha usual ing
Prefixes & Affixes dis dom, co m ment inter under, ent reco m circum sub, super, trans, tive tude, stion, tshun sion tion shun sion shun . ly
Representatives into, unto, world, &c. word, ward.
Double Consonant Sounds
bil below
bir breadth
dir direct
dw dwell
fil full
fir from
gil glory
gir great
gw language
egz example
kil call
kir care
eks except
kwe question
pil people
pir person
fir truth
tw twice
vil evil
vir every
shir short
thir through
THr their, there
zhr treasure

Isaac Pitman at Forty seven.

Phonography 1840

P			B
pl			bl
pr			br
lp			lb
rp			rb
pt			bd
T			D
tl			dl
lr			dr
lt			ld
rt			rd
tn			dn
CH			J
chl			jl
chr			jr
loh			lj
roh			rj
cht			jd
K			G
kl			gl
kr			gr
lk			lg
rk			rg
kt			gd
kn			gn

F			V
fl			vl
fr			vr
lf			lv
rf			rv
ft			vd
TH			TH
thl			thl
thr			thr
lth			lth
rth			rth
S			Z
s			z
SH			ZH
shl			zhl
shr			zhr
lsh			lzh
rsh			rzh
sht			zhd
shn			zhn
L			R
lm			rl
ln			rm rn
M			N
ml			nl
mr			nr
mp			nt
mt			nd
md			nch
NG			nj
ngk			H
ngg			hr

Vowels	Long		Short
e			it
a			et
ah			at
au			ot
ō			ut
ōo			oot
Double Vowels			
Ye			yi
yā			ye
yah			yă
yau			yau
yō			yŏ
yōo			yŏo
We			wi
wā			we
wah			wă
wau			wŏ
wō			wu
wōo			wŏo
I.			oi
ao			ou
Treble Vowels			
wi			woi
wao			wou

Isaac Pitman at Forty seven.

Phonography 1840

P			B
pl			bl
pr			br
lp			lb
rp			rb
pt			bd
T			D
tl			dl
lr			dr
lt			ld
rt			rd
tn			dn
CH			J
chl			jl
chr			jr
loh			lj
reh			rj
eht			jd
K			G
kl			gl
kr			gr
lk			lg
rk			rg
kt			gd
kn			gn

F			V
fl			vl
fr			vr
lf			lv
rf			rv
ft			rd
TH			TH
thl			thl
thr			thr
lth			lth
rth			rth
S			Z
s			z
SH			ZH
shl			zhl
shr			zhr
lsh			lzh
rsh			rzh
sht			zhd
shn			zhn
L			R
lm			rl
ln			rm rn
M			N
ml			nl
mr			nr
mp			nt
mt			nd
md			nch
NG			nj
ngk			H
ngg			hr

Vowels	Long	Short	
e			it
a			et
ah			at
au			ot
ō			ut
ōo			oot
Double Vowels			
Ye			yi
yā			ye
yah			yă
yau			yau
yō			yŏ
yōo			yŏo
We			wi
wā			we
wah			wă
wau			wŏ
wō			wu
wōo			wŏo
I			oi
ao			ou
Treble Vowels			
wri			woi
wraw			wou

Initial and Final Appendages.

Halving and Lengthening of Curves.

Adding	s	ss	sss	sl	sts	str	strs	n	ns	tion	tions	s-tion	s-tions
F														
s-f														
ss-f														
st-f														
fl														
s-fl														
fr														
s-fr														
f-t														
s-f-t														
ss-f-t														
st-f-t														
fl-t														
s-fl-t														
fr-t														
s-fr-t														
f-dr tr thr														
s-f-tr														
ss-f-tr														
st-f-tr														
fl-tr														
s-fl-tr														
fr-tr														
s-fr-tr														

Early Promulgation of Phonography

THE promulgation of Phonography in Great Britain, by a band of ardent young men, moved by an enthusiasm born of the conviction of the importance of the phonetic principle as a factor in education and general progress, began in 1842. My brother Joseph, who was four years my senior, was the pioneer lecturer and teacher. I joined him early in 1843, and Thomas Allen Reed soon afterwards. Within a few years the band of helpers in the new crusade included Henry Pitman, George Withers, G. R. Haywood, W. George Ward (afterwards mayor of Nottingham), Timothy Walker, W. E. Woodward (who

had been T. A. Reed's tutor in a private academy), J. H. Mogford, H. S. Brooks, C. Sully, F. Carson, the philosophic, critical, and aristocratic Mr. Edgar, and J. Hornsby. All these, with the exception of the last named, were young men who had received a good English and, in some cases, a classical education. Mr. Hornsby had been, from his early youth, a worker in a cotton-mill, but having been taught Phonography in one of the free classes, he became so enthused by its philosophy and utility that he abandoned his calling to become a promulgator of the art. He confined his labors to the more intelligent of the working classes in the populous towns of Lancashire and Yorkshire, from among whom he formed large classes, at a low fee, and taught the art with great success. All the lecturers and teachers named became, for a longer or shorter period, devoted missionaries in what they regarded as an educational and semi-philanthropic movement, teaching Phonography, more or less gratuitously, and advocating a reform in English spelling which would result in a great shortening of the time of children in learning to read, and tend to bring the elements of education within the reach of all. These literary reformers usually worked in pairs, and almost every city and town of importance in Great Britain was visited between 1842 and 1852. To the foregoing list must be added the honored name of T. P. Barkas, of Newcastle, afterwards known as Alderman Barkas. He confined his labors to his native place, but labored for years, with unflagging zeal, in teaching Phonography to large classes gratuitously, until it was said that even ragged urchins of the place were in the habit of chalking up moral apothegms, in correctly written Phonography, on the bare walls and board fences about the town.

At the earnest wish of my brother Isaac, I came to the United States late in 1852; and, at that time, I was the only remaining lecturer and teacher who had, for nearly ten years, made the dissemination of Phonography and Phonetics successful enough to yield a frugal living. Other teachers, after laboring for a few months, and some for two or three years, accepted positions as reporters, or engaged in other callings. There were two of these early apostles whose long, though occasionally interrupted labors in spreading Phonography, and in the public advocacy of the phonetic reform, were especially earnest and noteworthy. My brother Henry, who, with intermissions devoted to

the advocacy of other reforms, has been an active phonetic missionary for more than half a century. My brother Frederick became the London publisher of his brother's phonographic books, and a publisher of music, by which he made a fortune. My brother Henry, with less worldly wisdom, but with a wide-embracing thought and affection for humanity, has been a constant and faithful helper in many ways to make people wiser, healthier, and happier, and his long-continued devotion to a life of usefulness, though often repaid by rude rebuffs, has been as constant as it is admirable. Another of the early pioneers was George Withers. He was a nephew of Isaac Pitman's first wife. He was well educated; and if an intelligent person could be, George Withers was a fanatical advocate of the phonetic reform. He was not sufficiently practical to make the teaching of Phonography yield more than a scant and precarious living. After a few years spent in phonetic propagandism, he became private secretary to Mr., afterwards Sir, James Matheson, M. P. This gentleman, who had been a merchant—and made a great fortune by selling opium to the Chinese—had purchased the island of Lewis, the largest of the Hebrides, containing over five hundred square miles of land. An incident illustrating the independence and nobleness of character of my friend Withers is worth recalling. Sir James lived in a fine mansion in London, and the family employed a retinue of servants. On one occasion, from lowering of wages, restriction of privileges, or some other cause, not now remembered, the whole household of domestics struck for their rights. In the dilemma, Withers was appealed to by the mistress of the establishment. To the consternation of the family, he sided with the domestics, from a conviction that they had reason and justice on their side, and the misunderstanding was settled in their favor; but it cost my friend his position before many months had passed, when he again took to the phonetic field.

Phonography, as a time and labor-saving art, has now grown into such a mercantile necessity, both in this country and in England, and its practise is so generally regarded, from a utilitarian and business standpoint, that it will be difficult for the present generation of phonographers to realize how much its early dissemination was an educational, philanthropic, and missionary enterprise, usually accompanied by incessant labor, self-sacrifice, often privation. In its early days, Phonography was

never severed from its association with the much needed reform of English spelling, and the consequent simplification of elementary education, that would bring its benefits and blessings within the reach of all. During these early years my brother Isaac would again and again remind us: "Do not fail, after your pay classes are formed, to give a lecture on the phonetic reform; circulate documents and the Phonetic Journal, and show the necessity and importance of phonetic printing." Speaking from my own experience, and from the knowledge I have of the labors of others, the early advocacy of Phonography and the phonetic principle was not undertaken for gain or merely to earn a living, but was engaged in from a sincere love of the art, a desire to see its use extended, and a strong conviction of the educational benefits that would result from the adoption of the phonetic principle in writing and printing. Our motives in spreading Phonography may be inferred from the fact that where we taught one pupil for pay, we instructed five, on an average, without any thought of remuneration. In large towns and cities, where our stay extended to months, much of my time and labor were given to teaching Phonetic Reading to classes of ignorant adults, prisoners, and pauper children. This was done to test the practicability of Phonotypy, and to show in how brief a period the ignorant and the young could be taught to read by means of a consistent alphabet. In Manchester, Sheffield, Preston, single handed, and in Glasgow, with the assistance of my brother Henry, permanent Sunday-schools for adults of both sexes were established, where phonetic reading, lectures, and vocal music were made instructive and interesting exercises.

Our custom was to begin our labors in a place with an introductory lecture in a public hall hired for the occasion. Admission to the lectures was by card only, which could be obtained at the booksellers' stores gratuitously. The lectures were announced by tastefully printed handbills, which were displayed in the shop windows, and by advertisements in the newspapers, when any were published in the place. I made it a point to have these handbills printed with care and on good paper, and I never permitted one to be printed without seeing one or more proofs, and the exceptions were rare when I did not insist upon many changes in the display lines before they were made to accord with my ideas of good taste. I have at first annoyed, and afterwards

received the thanks of, many a compositor for showing him the difference between a tasteful and a vulgar use of type. In addition to handbills, we liberally circulated phonographic documents that gave an explanation of the principles and uses of the art, and contained the opinions of leading men as to its merit and advantages. Our lectures were uniformly attended by large and intelligent audiences, and, not unfrequently, were presided over by the mayor or some leading, influential citizen.

During my phonographic teaching career in Great Britain, which extended from the spring of 1843 to December of 1852, I lectured and taught in the following cities and towns of Great Britain, making a stay of from one to six months in each place: London, Manchester, Birmingham, Sheffield, Nottingham, Hull, York, Lancaster, Leicester, Preston, Derby, Chesterfield, Mansfield, Coventry, Whitehaven, Carlisle, Southampton, Winchester, Plymouth, Portsmouth, Penzance, Truro, Glasgow, Dumfries, Sterling, Dundee, Montrose, Kilmarnock, Perth, Aberdeen, Dublin, and Belfast. During this period I was assisted, first by G. R. Haywood, then by George Ward, afterwards by my brother Henry. These worthy helpers remained with me for periods varying from a few months to three years, in the case of my brother Henry. In visiting many places I was, professionally, alone, being accompanied only by my wife and infant daughter Agnes. My opening lecture never failed to be a trying ordeal to me. During the ten years I devoted to the spread of the phonetic reform in England, the first lecture was preceded by two days of unrest and misery. The day of the lecture especially, I suffered from depression of spirits, that, even to this distant day, it is painful to recall, but the instant I faced my audience it all disappeared. From the moment I opened my mouth and looked into the glad eyes of my audience, I was not only at ease, but felt as if possessed by a sense of exaltation in the performance of a pleasurable duty; and if the hall was not too large and the audience too numerous to be under my control, which was the case on only a few occasions, my lecture was successful. I had youth and health in my favor, and my powers of endurance must have been of a staying quality, for, at that time, I worked and walked and taught fifteen to sixteen hours each day. I never knew fatigue, nor did I know aught of ache or ailment of any kind. My living expenses for many years were not more than a dollar a week. When my brother

Henry was my partner, our united living expenses were uniformly between six and seven shillings per week. It was a practise, from which I never deviated on the day of my lecture, to touch neither food nor drink after my mid-day meal till after my lecture. This I did that my voice might be clear. I never had occasion to regret this abstinence but once. My opening lecture at Winchester was delivered while I was residing at Southampton. These cities are ten miles apart, and I walked this distance after dinner; and I distinctly recall the vexation I felt during my lecture from a lack of my usual energy. My audience seemed too much for me, and less sympathetic than usual. I had not then discovered the limit of my endurance, and I attributed my comparative failure on this occasion to stupidity, when in reality it was exhaustion and starvation.

Boarding houses, in the American sense, were not known in England. In each place we visited, we engaged two rooms in a respectable private house centrally situated, usually at from half to a guinea per week, which included service. In our sitting-room we lived, taught private pupils and small classes. Our habits of life were regular and frugal. If we visited a theatre we sat in the gallery. When we traveled it was always in third-class carriages, which, at that time, were usually open, breast-high trucks, without a top, in which passengers sat on nine inch boards laterally placed, with their backs to the locomotive, to avoid being blinded by dust and cinders. Parliament ultimately interfered with this barbarous attempt to drive people into second and first-class carriages, by compelling the companies to put tops to these windowless, penny-a-mile cattle pens.

On commencing in a new place, after engaging our rooms, I would advance perhaps half a guinea to the landlady with directions somewhat as follows: "We are simple in our living, and shall give no further trouble if you will let us have well cooked oatmeal porridge for breakfast, with a bowl of milk for each of us, taken the night before and allowed to stand for cream; for dinner we take potatoes with milk, and a fruit pudding for dessert; and wheaten bread and butter or toast, with fruit and tea for our last meal. We shall take this every day till we ask for a change," which we never did in any place or in any particular, except in a change of fruit according to its season. We had acquired the habit of assimilating and enjoying simple food from

living with Isaac, and we now continued a like frugal dietary from choice and as a duty. It would have robbed it of its charm to admit it was from necessity. Our living was so exceedingly frugal that, in the estimation of some of our landladies, it seemed not entirely respectable. On one occasion the comment of one of them, made to a friend of ours, happened to reach us. It was to the effect that, though we lodged and dressed and acted like gentlemen, we lived like beggars.

It is perhaps worth recording, as an argument in favor of a simple diet and a resulting healthy appetite, that the gustatory enjoyment of this fare must have been great, for, half a century later, I retain distinct associations of our stay in certain places, say Lancaster, for instance, for the glorious red currant and raspberry pudding we reveled in for our daily dessert; and Carlisle is associated with its admirably-cooked apple pudding, that daily graced and then disappeared from our festive board. It would convey a wrong impression if I dismissed this pudding episode without saying that, at the time, the fact would have possessed no importance beyond the temporary enjoyment which came from the gratification of an unvitiated appetite. Among the lessons we were taught in our youth, and which were confirmed by living with Isaac, was that of giving little thought to matters of eating, drinking and dress, and not to make them topics of conversation, except in illustration of a principle. The mention of Lancaster and Carlisle recalls our pleasant stay and successful labors in those cities. Lancaster, having no manufacturing industries, was not large enough to give us a free class, but I very distinctly recall the exceptionally intelligent private classes we taught. In one family of wealth and refinement I instructed a class of five ladies. They were not titled people, but of an old, wealthy and aristocratic stock, that showed the sweet graces and fine effects of generations of culture. I remember, too, that it was in Lancaster I taught a private class, each member paying his half-guinea fee, for a course of twelve lessons, and, as was our custom, I continued to instruct it freely, as long as I remained in the place. At the close of the lessons they insisted on my accepting a silk purse, which, on opening at our rooms, I found contained five golden guineas, at that time, and still more so now, a very rare and highly-valued coin.

Our stay in Carlisle, as might be said of our sojourn in

almost every place, has its distinct associations. We made an early visit to its grand old cathedral, dating back, I believe, to the eleventh century. Some religious paintings on the walls had been whitewashed over, but at the time of our visit were partly recovered; but my eyes were fastened on the finely-carved canopied stalls of the choir, the finials of which had been uniformly sawed off, giving them a strange, stunted appearance. On inquiring of the verger, we were told that these mutilations were the work of Cromwell's iconoclasts! Cromwell was one of my heroes, but the sight of this Carlisle mutilation, the skilled work of pious monks, terribly shocked me. I had no radical objection to his chopping off the head of a faithless King, but to destroy the finest carving in this grand old cathedral, simply because it was a thousand times more beautiful than anything they possessed in their barn-like conventicals, or could appreciate, seemed an unpardonable barbarism. Among my pupils in Carlisle I taught the grand-daughter of Archdeacon Paley, who will be remembered as the author of the "Evidences of Christianity," and who had been Archdeacon of Carlisle. She was a lady of great intelligence and refinement, and seemed quite charmed with the philosophy and utility of Phonography. Carlisle, too, is remembered from the fact that, while there (1847) I wrote in lithographic style, and published for the use of my pupils, what I think was the first reading book of selected matter in Phonography. It was called the Phonographic Bijou.

Though I never repeated a lecture, there was a general similarity in the choice of matter and the order of its arrangement. The introductory part might deal with the possible universality, nobility, and richness of our language and literature; the importance of an alphabetic representation, and its dissemination by printing, as the prime element of civilization; a sketch of represented language, from the pictorial, symbolic, and the hieroglyphic methods, to the Romanic alphabet. The current system of writing, its length and shortcomings, were referred to, and the absurdities of our orthography, were always made a telling feature. Illustrations, rapidly and distinctly written on the blackboard, never failed to put an audience in good humor. How could it be otherwise, when, for example, after showing how varied were the powers of every letter in the alphabet, and how numerous were the ways in which each sound of the language

was represented, we gravely proposed to spell *scissors* by the combination *psozzyrrzz?* This was but one of the eighty-one million ways in which we *might* spell the word, every one of which would be justified by the spelling of other words:—a truly orthographic jumble for *sizers*, or *sizurs*, but justified by the *s* in *psalm*, the *i* in *women*, *z* in *buzz*, *ur* in *myrrh*, and *z* in *whizz*. Sometimes we took time to be exact, and showed, quoting from the tables given in Dr. Ellis' "Plea for Phonetic Spelling," that the *sound* of *s* was represented in nineteen different ways, *i* in thirty-seven, *z* in eighteen, *e* or *u* (the sound represented by *o* in the spelling of *scissors*) in not less than thirty-six, *r* in ten, and the final *z*, as we before stated, in eighteen different ways. If the varied powers of these letters are multiplied one by the other, the total number of spellings will be 81,997,920 different, justifiable forms, in which the word scissors *might* be written.

The audience would now be ready to listen to an explanation of our proposed phonographic substitute, which, being strictly phonetic, would be free from the absurdities and time-wasting perplexities of the common spelling, and in which, instead of employing lengthy forms for the representation of sounds, as in longhand, the briefest geometrical signs were used, thus securing facility and speed in writing, and as each sign was used for but one and always the same sound, the letters of the phonographic alphabet were as unchanging as are the powers of the Arabic numerals, and Phonography, therefore, was always reliable, certain, and legible. An explanation of the phonographic alphabet followed as I referred to a large and well-painted chart of the vowels and simple consonants, which was suspended immediately behind me. My exposition of Phonography was made interesting and effective in the degree in which I succeeded in turning my audience, at this stage of my lecture, into a class, and this I invariably did. It is pleasant to recall the intelligent enthusiasm that was, as a rule, enkindled by these early phonographic lectures. When the alphabet of consonant signs had been briefly explained, I made it a point to repeat certain of the phonographic signs on the blackboard, as ╲ *p*, | *t*, — *k*, ⌒ *m*, ⌣ *n*, so that they would be memorized, then to show how they were joined, and I proceeded no further nor faster than I knew the majority of my audience followed me. After this, the vowel signs would be written after the letter | *t*, and perhaps after the horizontal letter

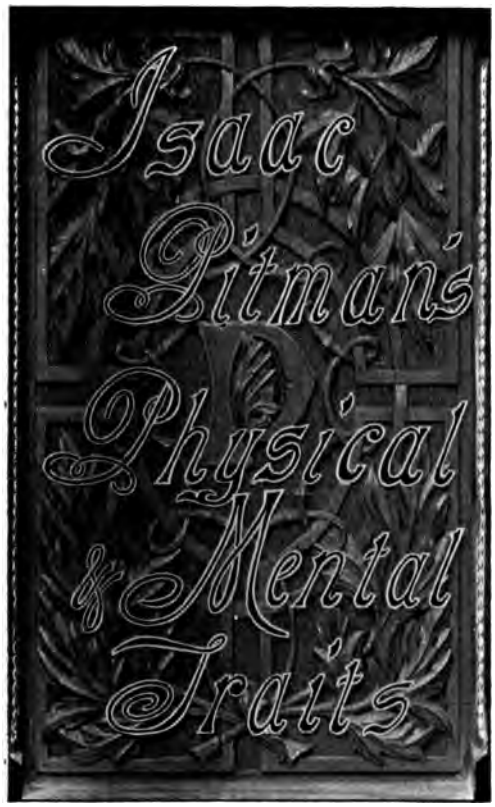
— *k*. Then I would make the letter ⌒ *m*, and below it write "the first-place heavy vowel," after naming it; I would suggest that probably some of my auditors would know the word I had written, and some one would be sure to say *me*. Then I would add a *t* and again intimate that probably some one could name the word I had written. Some one would be sure to show their ability by answering *met*. Then would occur the lecturer's opportunity to enlist the interest of all who had not blundered. I would recall the phonetic principle before explained and insist that if *me* spelled *me*, — and the phonetic principle allowed no change, — *m-e-t* would not be *met*, but — and numerous voices, newly awakened to a recognition of the phonetic principle, would answer *meet*. Then would follow many other examples of simple words, phonographically written, and the lecturer would have his entire audience reading selected words as fast as they were written, and people were delighted to find that they *could* read with ease words thus phonographically expressed. These blackboard exercises were followed, and the lecture concluded, by illustrations of phonographic reporting. I would read a passage from a book, leaving the audience to name the page, at the rate of 120 to 130 words per minute, to my brother Henry. The correct reading of the passage from his phonographic notes always called forth an approving cheer. To show that phonographic reporting and reading were not an effort of memory, I would read a passage backward, then when Henry read his notes backward, the audience would get the sense of the passage, and at the same time a proof that it was the legibility of the system, and not memory, that was concerned in deciphering it. The reporting experiments were always received with interest and delight, for my younger brother showed an intelligence and skill that were admirable. A brief announcement of the classes we intended to open concluded the lecture, when the president, if we had one, would be sure to make a few eulogistic and commendatory remarks, and then would follow a rush to the platform to buy the Manual that explained the wonderful system!

In places that contained an industrial population, it was our custom, after our pay classes were formed, and we had organized classes, as far as practicable, at the private schools, to announce another public lecture (usually given in the Sunday-school room of some leading church) for the purpose of forming

a free class for the intelligent among the working people. In the manufacturing towns of the north of England these classes were very numerously attended. The announcement was made at the lecture that, as certain expenses would necessarily be incurred for printing the lecture bills, lighting the room, and for janitor's attendance, if each pupil paid one penny each evening to meet this expense, we would be only too happy to give them the necessary instruction to make them practical phonographers. This was always answered by a cheer and the resulting classes were always large and teaching them became the pleasantest duties of our life. There was really very little generosity in our offer. These free classes, with few exceptions, paid all expenses, and the profit on the sale of the books was a welcome addition to our earnings, and increased the remittances we were able to send to our hard-pressed brother Isaac. These classes were attended by pupils from sixteen to sixty years of age, and they varied in number from fifty to two hundred, and even more, according to the size of the place. Occasionally, but rarely, there would be a sprinkling of young women. The classes met on two evenings of the week, which gave the pupils time for practise between the lessons, and seldom did a pupil present himself without bringing a written exercise showing several hours of studious application. Of those who were instructed in these free classes some became professional reporters. One of the most skilled and accurate reporters I have known in this country, who came from Scotland, told me that his father, who was his instructor, had been a pupil in our Aberdeen free class. This reporter attributed his dexterity to the fact that when he was a youth of fourteen, and up to the time he left home, he was accustomed to report the Sunday sermons, which he afterwards read to his mother, whose defective hearing prevented her from attending the services.

These free classes had a delight all their own. The spirit that prevailed seemed to be an intelligent excitement. The explanation of the system, with illustrations on the blackboard, the simultaneous reading and writing of words and sentences, made the hour pass all too soon. The gradual unfolding of the system was received with delight and surprise, and as each new principle was explained, the pleasure and satisfaction of the pupils would be shown by broad smiles, and the more receptive ones seemed ready to spring from their seats! I have again and

again heard from pupils at the close of the lesson such exclamations as "I never enjoyed anything so much in my life!" From many cities and towns we were not allowed to depart without some demonstration on the part of our pupils; presents, written addresses, and a tea-drinking soiree or phonetic festival, with music, appropriate speech-making, congratulations, and good wishes, would pleasantly and affectionately close our labors in the place.



ISAAC PITMAN'S habit was to rise at four, and never later than five, o'clock summer and winter. His toilet and devotional reading being over, he was always at his desk at six o'clock, whether he worked at home or in his office, which was more than a mile from his residence. The mere statement that he worked from six in the morning till nine and ten at night, with brief intervals for meals, every day in the year, that for fifty years he rarely, if ever, took a holiday, and that he scarcely ever partook of a meal away from home, save when on a lecturing journey, conveys but an imperfect estimate of his daily work, unless it be borne in mind that his life was a succession of duties which, to the average man, would be felt to be an unremitting strain of head, eye, and hand. Those who are familiar with lithographic-transfer writing, of which Isaac Pitman did such an immense amount, know that it requires a steady, even, and delicate touch, secured only by a concentration of the powers of the hand, eye, and brain, and an absolutely tranquil mind, to produce the precise and satisfactory results shown in my brother's works. Preparing, proof-reading, and publishing a constant succession of new books, conducting his two or three monthly magazines, keeping up with his immense correspondence, and attending, unaided, as he did, to every detail, he lived a life of unvarying, calm, persistent, almost automatic labor, that has rarely, if ever, been equalled. In 1849, after fifteen years of this kind of work, when attending a phonetic festival at Nottingham, addressing an

assembly of those who had been instructed in Phonography by my brother Joseph and myself, Isaac Pitman said:

"I am sometimes told that I shall wear myself out in a few years, but I think differently. I take everything very calmly, and have acquired the habit of doing my work quickly, in short-hand style. I have adopted temperate habits of life and early hours of rising and going to bed; and I have the happiness of being descended from a healthy stock, being the third child of a family of eleven, only one of whom died in youth, and the youngest of whom, Frederick Pitman, is now on the verge of manhood. I am now thirty-five years of age. My father, an eldest son, is now sixty-one and has scarcely passed the prime of life, and his father, who is eighty-one, gives promise of a few more years in this world. And I may add that when I was a boy I attended my great grandfather's funeral. I hope then, through the Divine mercy, I may reach the age of eighty."

Close upon half a century after this a lady visited him (March 9, 1895), and wrote in a London monthly magazine:

"I knew that tomorrow would be his eighty-second birthday, and, had he received me in an easy chair by the fireside, it would have seemed the most natural thing possible on a cold afternoon in midwinter. Instead, I found him in his study seated at his writing table immersed in correspondence, and with no apparent thought about fire. He rose quickly to greet me in his simple, kindly way, and I saw that though his back was slightly bent and his hair and beard were white as the snow outside, his eye was bright and keen, and his face ruddy as a winter's apple. There is a juvenility, too, about Sir Isaac which is very bewildering, for he skips and runs about the house from one room to another, and jumps upon tables and chairs to reach down a book or a picture in such an agile manner that it would put many boys to shame."

It might have been said of my brother, with more truth than of most men, "There is but one Isaac Pitman." Yet, strange to say, the world contained at least two, as is related in a letter from my esteemed friend, the late Dr. Thomas Hill,* former President of Harvard University:

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*Dr. Hill was one of those rare souls whom it is a privilege to call your friend. He was a profound mathematician, and his general information was immense. His genial nature made his talk most varied, interesting, and instructive; and of all those with

Waltham, Mass., 22 June, 1891.

"I have wanted to tell you, if I have not done so, of a curious coincidence. Professor Barber, at Meadville, told me that when he was in Somerville, Mass., he had a parishioner named Isaac Pitman, a very enthusiastic phonographer. This American Pitman went to England, and while there called on your brother Isaac Pitman. The two men had been born and brought up on opposite sides of the Atlantic, but were of no known relationship. But they were of the same age, of the same name, with the same zeal for Shorthand, with the same devotion to Swedenborg, and with the same adherence to two or three other isms; Professor Barber thinks that homeopathy and vegetarianism were among them. This is, it seems to me, a very curious set of coincidences, and would seem to indicate the probability of mental peculiarity inherited from a common ancestor several generations back."

That the two Isaacs were not Dromeos, is shown by the fact that one had leisure to make a pleasure trip across the Atlantic, partly to see his twinship, while the other lived a life of incessant occupation, never, seemingly, spending an hour of his waking life in doing other than the immediate, pressing duty that lay before him. I could give a hundred instances of my brother's devotion to duty rather than yield to what might be called his natural inclination. His sister Rosella, for example, the next younger than Isaac, was, from her fine intellectual and moral nature, more esteemed than either of his two younger sisters, yet he wrote to me (Bath, 13 May, 1853): "Dear Rose is with us. She came yesterday and will leave tomorrow. So beset with work am I, I cannot take a single hour to be with her." My sister had not seen Isaac for two or three years, and he was the sole attraction in her visit to Bath. They would meet at their brief meals, but beyond this, so "beset" was he with work—or, as Rose might have interpreted it, so exacting were his self-imposed duties—that

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whom I have been brought into friendly contact in this broad land, he certainly was one of the most worthy, intellectual, and likeable I have ever known. Dr. Hill was a practical phonographer, and a stanch friend of the phonetic reform. As chairman of the school committee, he inaugurated and superintended a series of experiments in the public schools of Waltham, in which it was clearly shown that, by beginning with the Phonetic method, children acquire the ability to read the common system in much less time than if they began with it, and that its use was attended by many advantages, prominent among which were that it tended to give distinctness of articulation and accuracy of pronunciation. The report of these experiments (1853) was widely quoted in this country and in England.

he could not conscientiously spare a single hour to respond to the call of his natural affection when weighed against the duties and attractions of his phonetic mission. That Isaac Pitman possessed strong natural affection, every one who knew him felt assured, but so absorbed were his mind and heart in his special work, that other things were relatively of slight importance. For example, my wife had suffered from a severe fever and illness, soon after our landing in Philadelphia, in giving birth to Ellis, my second born son, due chiefly to our unusually long and tempestuous voyage. Both of our boy babes were prostrated by sickness that soon terminated their earthly career. I suppose I had communicated these facts to Isaac. His next letter, containing four pages of closely written Shorthand, was wholly occupied with details of phonographic business matters, but the last three lines read, "My hearty sympathies are with you in your domestic trials. Happily there is no poverty in addition. With many kisses for the dear sufferer and sweet little Agnes; farewell!" (the last word crossed with a double phonographic kiss). Whether my brother's life would, on the whole, have been happier, had he taken a different view of the relative importance of his special mission, it is impossible to say. Such was his peculiar organism, such were the unusual circumstances which accompanied his special work, that he probably could not have been other than he was, or have done other than he did, and most likely he got out of life all the happiness he wanted, or deserved, or was capable of enjoying.

My brother's love and friendships depended chiefly on his sympathy with those possessing the following characteristics: a passion for phonetics and the Phonetic Reform, when in agreement with his special view of the subject; simplicity of living and purity of life and conduct in accord with his own high ethical standard. Agreement on religious points, when not accompanied by these other essentials, did not seriously affect him, and blood relationship, except so far as it was accompanied by traits of character referred to, did not seem to weigh with him at all. I do not mean that Isaac was devoid of family affection, but that certain spiritual and mental affinities vastly outweighed them. He could be as impartially severe in his censure of any member of the family, who acted in a manner contrary to his ethical standard, as to the veriest stranger. I do not think he ever prized or retained a friendship where any of the essentials named were

lacking. He had a great horror of smoking, yet I accompanied him once when he tolerated and walked in company with one who smoked, but who chanced to be the son of his dearest friend, who had introduced Swedenborg's writings to his notice. It was in an early morning walk over the downs at Clifton to view the first wire that had been stretched across the chasm in which flowed the Severn, from the piers of the first suspension bridge built in England (1842). Our friend, on striking a match to light his cigar, said, "I hope my smoking will not be disagreeable to you," to which Isaac quietly replied, "Not if you will permit me to keep to the windward of you." I looked for at least a gentle reprimand, but nothing more was said on the subject, and we walked and talked and greatly enjoyed our morning constitutional. Smoking was regarded by him as a terribly disagreeable habit, and one who used tobacco in a still more offensive way—I question if he ever encountered such—would have shocked every fiber of his physical and spiritual nature. My brother's extreme repugnance to tobacco was both physiological and ethical, and was probably due less to prejudice than to the keenness of his olfactory powers. He was like Thoreau, who also had a great aversion to smoking, of whom it is said that, while living as a recluse at Walden, he would be notified of the passage of a traveler along the highway, sixty rods off, by the scent of his pipe.

Isaac Pitman was disinterested and generous to a fault; but, like all things human, his generosity had its limitations. It is equally true that he was determined and exacting in his convictions, and he conscientiously made his conduct square with his belief. This, of course, was not always agreeable to those who worked with him, and whose convictions, though different, were entertained with equal sincerity. He seemed to believe that the phonetic scheme of writing and printing had been committed to his special charge, and that its development was his assigned work. He acted as if persuaded that he was commissioned with an almost exclusive right to determine its manifold details and mode of promulgation. It would be unjust to his memory not to insist that he was unconscious of his autocratic rule. His convictions were deep and decided, and that only which appeared for the time truest and best would he tolerate. No sacrifice was too great to be rid of a blemish; no effort too great to secure an improvement, and no persistence

too prolonged to gain a victory for what he regarded as the truth and the right. He was not always logical, for the "best" today might be succeeded by a "better" on the morrow, and the "foundations of truth," sound from today's examination, might be discovered to need repairs before the next month's magazines were put to press. But he consistently carried out his belief, and generally at a pecuniary sacrifice. The belief of today would be no criterion of his convictions on the morrow, and the latter decision might prove more costly than preceding ones, but it would be as consistently carried out, and a kind Providence was trusted in some, for the time being, unseen way, to take charge of that looming type or paper bill, and the compositors' and printers' wages, on the coming Saturday. But, oh, the pitiful strain of those years of ever-present, ever-pressing poverty! It might have been an unconscious spur to goad him, and keep him at his racing pace; but the mental strain of this brooding incubus of debt—the subject of very frequent mention in the hundreds of his letters lying at this moment before me—would have been too much for the mental balance of any soul endowed with less energy, conscientiousness, and hope. My brother was a bundle of activities, and as they were directed to one end, they found exercise in endless experiments with the possibilities of his beloved scheme. How often have I heard from his stanchest friends, "What *does* Isaac Pitman mean by these constant changes?" There was but one reply: "A seeming improvement presented itself, and he was bound to carry it out." My brother Henry, writing to me from Bath, 10 October, 1851, while I was engaged in lecturing on and teaching the perfected (?) Phonography, said: "I am learning, or trying to learn, every day that it is useless to attempt to check Isaac's irresistible determination to have his own way. Mr. Reed and myself, by an apparent acquiescence, induced him to give up a half-dozen of the proposed phonographic changes. It would amuse, if it did not grieve you, to see the number of alterations which are made in in one day in the 'Proposals.'" This, we suppose, referred to the MS. for the lithograph magazine, which was, for a time, published under this title and circulated among the leading English and American phonographers, containing discussions on the improvements which are incorporated in the tenth edition of the system, and which, with the exception of the inversion of the

first and third vowels, is substantially the American Phonography of today. Phonography might not have been as near perfection as it now is, had it not been for the constant experimenting and trial that were given the possible "changes for the better" by its indefatigable inventor; but the present generation can have but a faint idea of the commotion in the phonographic world, the inconvenience to teachers of the art, and the annoyances to practical phonographers, as well as to the teachers of phonetic reading, that arose from my brother's undue haste in incorporating changes and supposed improvements into the system, without sufficient consideration and trial.

But it is only fair to say that in the endless discussions of the English and American Phonetic Councils that were carried on from 1844 to 1851, to whom disputed points in Phonography and Phonotypy were submitted, Isaac Pitman was always patiently and calmly, if provokingly, serene. He was fair in argument; he never used a harsh or cutting phrase, but urged his views with seeming deference to the opinions of others. He never, however, yielded a point which, for the time being, seemed best and most desirable. He patiently continued the discussion until his opponents were silent—possibly wearied—or convinced, and his best friends, whether agreeing or disagreeing with him, were in the habit of saying, "Isaac always carries his point." The truth is, he simply continued the discussion, arguing for the fitting thing, and delayed the voting,—when a vote was to decide the question,—until his point was gained. Better that the heavens were rent in twain than that any blemish should mar the symmetry of his beloved scheme! He labored and argued from an instinctive, irresistible impulse, until the real or imaginary blemish was removed and the fitting thing accepted and installed. Those who agreed with him found him a redoubtable leader; those who disagreed were often disciplined into line by his chilling and unswerving conscientiousness—a condition of mind which, under human limitations, is as liable to be wrong as right. I could not give a better illustrative example of Isaac Pitman's perseverance, changefulness, and conscientious following of his convictions, notwithstanding the sacrifice it entailed, than by mentioning that in the publication of "Milton's Paradise Lost," one of the first of his Phonotypic books, portions of the work, varying from 8 pages (one form) to 96 pages, were set up and

printed, and then, in consequence of some improvement he thought should be made in the forms of certain phonotypic letters, they were canceled and thrown aside as waste paper, and these cancellations of printed portions of an edition of a thousand copies, and then recommencements of the work, occurred not less than nine times before the book was actually printed and ready for the binder.

ISAAC PITMAN'S career as student, clerk, schoolmaster, preacher, lover, husband, Bible corrector, inventor, author, journalist, publisher, compositor, proof reader, dictionary compiler, lithographic-transfer writer, and indefatigable worker generally, was, in its varied phrases, a striking manifestation of an altruistic spirit laboring unceasingly for the benefit of others. Personal gain or honor as a reward for what he did was as unsought and unthought of, and as foreign to his nature, as it would be for a loving mother to expect reward for nurturing her child. His delight and satisfaction were in the performance of the duty that presented itself, and his energy and eagerness were always proportioned to the task undertaken. My brother never would have accomplished what he did in his long life of labor, or have made what to others seemed unending self-sacrifices, had he not been upheld by an enthusiasm that never forsook him, and which was based on an abiding faith in the necessity and usefulness of the work that had fallen to his lot. But it must be confessed that his unsophisticated and uncalculating nature often made success fall short of what it might have been had his efforts been spiced with a soupcon of worldly calculation. The first edition of Phonography, issued in 1840, the result of the preceding three years of incessant experiment in completing, as he thought, the crude Stenographic Soundhand of 1837, was published at one penny, that it might, as the author desired, be brought within the reach of every school boy in the land. The entire system, with explanation and exercises, was crowded into a six-by-eight sheet of exceedingly fine steel engraving, the sheet contain-

ing on its margin the announcement that the author would correct the exercises of learners through the post gratuitously. Generous, indeed, but measurably futile, for the explanations, examples, and exercises were presented with such microscopic fineness, that probably not more than one in fifty of persons of ordinary intelligence would possess the ability and industry necessary to unravel so intricate a presentation. He overlooked the fact that others were not so clear-sighted as himself, or that in general they possessed about one-tenth of his untiring industry. He seemed unable to comprehend the narrow limits of people of average ability. Hence his presentation of the system in the first and second editions of his Manual was far from being as simple and sequential as is desirable in an instruction book. It was not until my brother Joseph and I began to teach Phonography that we perceived the necessity of a simpler and more methodical presentation of the art, and it fell to my lot to compile the necessary instruction books. I never thought it necessary or desired to make this fact known till the suit of A. J. Graham was instituted against me, when he sought to deprive me of the right to publish my own Phonographic books. I then put my brother's letters in evidence to show that I was not only entitled to the copyright of my own books, but that I was the author of some of the leading English text books. My brother was the inventor of the system, and I was the compiler of several editions of his Class Book, afterwards called the Instructor, and of two editions of his Manual of Phonography.

My brother's daily labors for many years would average fifteen hours of close, stern application to duty, but he did not feel it as such. It was a life of self-sacrifice, but he knew it not. He sacrificed himself, and he looked for self-sacrifice from others, and in the degree in which others were esteemed and were dear to him. After ten years of public lecturing and teaching in Great Britain, my brother was very desirous that I should come to this country to further extend Phonography and the Phonetic Reform, and to engage in the publication of works that should do less discredit to the cause than most of those which had been issued here prior to that time. He sent me, my wife, and two infant children across the Atlantic as steerage passengers in the midst of winter, because it seemed to him necessary that my advocacy of the phonetic reform here should not be longer delayed. My wife

was a delicately nurtured and highly endowed soul, to whom he was devotedly attached, and when I think that he had ten years more experience than I, it amazes me that his enthusiasm should have demanded such a sacrifice from her and from me. I undertook the mission with a willing alacrity that seems now quite incomprehensible. The novelty of the voyage concealed its discomforts. Our vessel was run into by a returning steamer before we left the Mersey, and we stopped several days to repair the gapping rent made in our vessel's side, fortunately just above the water line. The voyage was long and tempestuous. The care of my three charges filled my whole time with necessary and not unwelcome duties. My wife and infant child were located in a different and pleasanter part of the vessel, and my two-year-old daughter, Agnes, was left wholly to my charge. So incessantly were my attentions required that I did not open a book, magazine, or paper during the voyage, which extended to thirty days. But the passage seemed to me a holiday, and a season of exhilaration that recognized neither danger nor discomfort. Such was the effect of health, hope, and buoyant spirits. My wife, who had scarcely left her berth during the entire passage, bore the trials of the voyage with a brave and cheerful spirit; not a syllable of complaint or suggestion of dissatisfaction was uttered. The preparation of food for my infant child, which was done in the cook's galley, was a feat which frequently taxed my utmost dexterity. An occasional half-crown to the cook kept me on friendly terms with him, and his fires were at my disposal at all times day and night. The preparation of the infant's food over the galley fire during a storm was a feat of skill, and carrying the hot food to a distant berth along the deck of a rolling and pitching steamer was, in stormy times, not often accomplished till two or sometimes three separate attempts had been made, and as many of my amateur efforts at cookery had been tempest-tossed and lost. The struggle of the vessel as it made headway through the wild turmoil of the heaving sea had a strange fascination for me, and served to arouse extra interest and energy in overcoming the difficulty attending the novel duties that fell to my lot. We were excited and overjoyed to reach the shores of the new world, and on a genial, sunshiny day in January, 1853, such a day as is almost unknown in England in winter,—and the novelty of which I seemed to enjoy for the first time in my life—we plowed our way

up the Delaware through four inches of unbroken ice, and landed on the evening of the day. Most of the passengers left the vessel immediately upon touching shore, but we remained on board that night. In the early morning I stepped ashore, and no one being near, I reverently knelt and kissed the blessed land I had reached, less from a sense of danger escaped, than in joyous anticipation of the duties and occupation that the new world would open up to me.

The practical phase of Isaac Pitman's life is told in a characteristic pen sketch by an Episcopal clergyman, which appeared in Welden's Register at the time my brother was occupying the building in Parsonage Lane. The writer says: "If we were asked to name the most diligent and hard working man we know, it would be Isaac Pitman. It is a treat to visit his printing office in Bath. Printing offices are usually very dirty and untidy places, but Mr. Pitman's office, save for the furniture, might be a lady's drawing room. Everything is in what for some unknown reason is called 'apple pie' order. In a large room sits Mr. Pitman himself, writing an article, reading a proof, or answering a letter. His correspondence is immense, letters and papers flow in upon him from every part of the world; he attends to all himself. Those who write to him in ordinary handwriting he answers in long-hand or in phonetic spelling, but the mass of his correspondence is in Phonography, and the speed and ease with which he writes enables him to get through an amount of work which would else seem fabulous. We wish we could reproduce one of Mr. Pitman's phonographic letters on this page. Written on a scrap of ruled paper half the size of an ordinary page of note paper would be seen a series of lines, circles, and dots, sharp and delicate as if traced by a fairy, and containing as much matter as an ordinary letter of four pages. A most courteous correspondent, he commences in the ancient style, 'Isaac Pitman to Mr.——, or Mrs. ——, or Miss——' as it may be, and goes on to say what is necessary in a free, kindly, and concise style, closing his letter with the simple word, 'Farewell.' Letters in this way he writes off by the score, without haste and with an ease which fills one used to drudge with the pen in the customary fashion with pity for his own sad lot.

"Mr. Pitman carries in his printing office the regime of the schoolmaster; he is a strict disciplinarian. No talking is allowed

beyond necessary questions and orders, and the quiet is unbroken except by the click of the type or the packing of parsels for the carrier or the post. We have sometimes amused ourselves with drawing comparisons between Isaac Pitman and John Wesley, and did we believe in transmigration of souls, we might imagine that the soul of John Wesley had left its 'world parish' to write Shorthand and persuade Englishmen to spell phonetically. Unlike Wesley, Pitman is somewhat tall, but, like him, he is spare and muscular, with bright eyes and keen face and rapid motions. Like Wesley, his habits are regular and almost ascetic. He goes to bed early and rises early, summer and winter, and may invariably be found posted at his desk by six in the morning. Except for the progress of his work, he seems to have no care in the world. He sees no company; he seldom dines from home or pays visits, and, first in the office in the morning, he is last to leave at night. He delights in walking exercise, and scampers over miles of country with the same ease that his pen goes over paper. Like Wesley, he is very abstemious; wine, beer, or spirits of any kind never pass his lips, nor fish, flesh, nor fowl. For years he has been a strict vegetarian, and but for a cold now and then he has enjoyed perfect health. As if his Shorthand and phonetic printing were not enough to task all his powers, he preaches each Sunday in a little Chapel at Twerton, a village two miles from Bath. Like Wesley, he has no love for money save for its uses in promoting his ends. His personal wants are few and simple, and every penny beyond what is required for them is devoted to the phonetic propaganda. Like Wesley he has a governing and despotic temper. In all things he takes his own way. He hears the advice of a disciple in the blandest and most candid spirit. The disciple thinks surely never was a man more pliable than this. But if he observes carefully, he will discover he has made no progress. Somehow, he will find that Pitman has not changed his mind, and has rejected his disciple's advice, but yet so kindly that the rejection gives no pain, but almost pleasure. His alterations in Phonotypy and Phonography have usually been proposed in the face of strong opposition, but he has always carried them. Consciously or unconsciously he makes up his mind as to what ought to be done, and though he undergoes much palaver with all the appearance of being affected by it, he ends in executing his program to the final letter. Alternately he is accused of

fickleness and obstinacy; of fickleness, because when he sees, or fancies he sees, a possible improvement, he will pull down any amount of building to make room for it; and of obstinacy, because what he thinks right he does, whatever be the outcry."

IF Isaac Pitman, with his acute and almost morbid sense of duty, had been of an irritable temperament; had he eaten and drank as the average man of literary and artistic temperament does; had he failed to comply with the strictest health conditions he would probably have ended his life in a lunatic asylum. This is often the fate of the too-earnest worker, who unduly taxes some limited portion of his brain power. Those who suppose that the discussion of questions of phonetic science and graphic art, and the reconcilement of conflicting views thereon, are not matters to arouse caustic words and excited feelings, are ignorant of the evolutionary steps that have led to the development of the phonetic arts, and given Isaac Pitman's name a place in the history of educational progress. For many years in the early stages of the phonetic movement there existed a Phonetic Council, consisting of twelve to twenty members, who, by their general intelligence and special study of phonetics, were supposed to be able to give an intelligent opinion on matters that should be submitted to their decision. Dr. Alexander John Ellis was president of the Council, and my brother and I were members. The communications of the members, usually written in phonography, were passed round to members by mail, as an ever-circulating magazine.

Matters of science and practical art one would suppose might

be discussed with calm impartiality; but phonetic questions cannot be considered apart from the physical as well as mental idiosyncrasies of the writer, and the result in our case was that the communications of some of the members were frequently of the most emphatic and dogmatic character, and occasionally members would be so firmly convinced of the correctness of their opinions that they would not allow that a contrary opinion could be entertained by any sane person, or even by one of ordinary intelligence. Among the questions discussed were such as the pronunciation of certain words and classes of words; what vowels should be used in certain unaccented syllables; the division of syllables, and the most desirable typic, script, and graphic representations of sounds; yet these and like questions were sometimes discussed with such savage gravity, that on one occasion a member seriously inquired, "Is the discussion of phonetic science necessarily inseparable from insanity?" The grim humor of the query was not lost upon the Council, and I think that in subsequent years we endeavored to settle phonetic questions with a little less of the zealous acrimony which too often distinguishes religious and political discussions.

Of all men I have known, Isaac Pitman stood alone in the placid, self-centered equilibrium with which he performed his never-ending labors, and for the earnest persistence and provoking calmness he maintained through these years of discussion. Beyond doubt, his temperate diet and regular and ascetic habits were conducive to a long continuance of his unremitting toil. His example is of interest as affording a contrast to the fate of some other one-idead men of unusual capacity, whose thinking and work have ended in physical and mental disaster. It is saddening to recall the numerous instances where an all-absorbing idea, pursued with unflagging energy, neglectful of other conditions necessary to healthy equilibrium, has resulted in physical and mental wreck. A late striking example is that of the grand artist Munkacsy, who, though he commenced life and passed early manhood in poverty and a struggle to live, had in middle life produced work that commanded admiration, abundant reward, and abounding honors; but yielding to the ambition to do more and better work, and with grudging impatience of his powers, even at their highest strain, he labored on to end life with a body prostrate and a mind sunk in the oblivion of madness. The marvelous

feats and brilliant career of Paul Morphy, ending in a mental collapse, are recalled by the more recent parallel case of the celebrated chess-player, Steinitz, who, for a time, defeated every world-renowned player, of whom it is said that he thought chess, dreamed chess, and lived in a world where the only visible object was a chess-board; but at last meeting defeat from a younger player, Lasker, the tension of an overtaxed brain suddenly gave way, and Steinitz became demented. Equally pitiful, but more striking, is the example of the literary man, Albert Ross, whose overmastering desire was a greed for money. To this end he wrote obscene novels that brought him wealth; with this he speculated, and the wealth thus accidently gained only stimulated him to speculate for more. His success ended in a madhouse, where he died bewailing his imagined poverty, and mumbling curses on the ill-luck that had made him a pauper.

When I recall the many personal friends whose lives have been shortened, if not sacrificed, by faithful devotion to duty in some narrow rut that modern life and competitive antagonism have made a necessity, I am filled with gratitude that I inherited some of my father's ingenuity, which, though it has prevented me from becoming rich and being knighted, has made me a proverbial jack of many trades, yielding satisfactions and delights compared with which riches and knighthood would be a barren mockery. My father was a man of varied and inventive powers. He rarely used a machine in his manufactory for any length of time that he did not alter and improve. Three of the boys and one of the girls inherited father's inventive and constructive ability. Isaac possessed no mechanical ingenuity. He had accurate vision and a delicate and precise manual touch, but his bent was literary, and that created and settled his career, and his devotion to duty, which he inherited from mother, made life a success. His life, however, was not an all-round success. And whose is? His devotion to one idea made his life an automatic clerkship, pursued with a conscientious zeal we have never known equalled. Most fortunate for him it was that he loved his work; his work was his pleasure, and his only pleasure was his work. His life was beautiful because his labor was so wholly unselfish. It brought him wealth and honor in the end, but they were unsought, and uncared-for except as means to useful ends; but if poverty, neglect, and persecution had been the sacrifice required of him to

accomplish his work, they would have been met with equal earnestness and equanimity.

He was somewhat deficient in esthetic taste. He was precise, orderly, methodical and clean in body and mind, and with a simplicity and directness of soul that we look for only in the innocency of childhood. But he had little appreciation of, or care for, things of beauty, or of fine art works, especially if they called up associations with which he was not in sympathy. I recall, when a youth and living in his family, looking again and again with great interest at a precious vellum manuscript, rich in its gold and color illumination, but which lay totally uncared-for amid a heap of valueless papers in the sitting-room cupboard. This, and other like relics came into Isaac's home possessions from his wife, whose first husband was a man of great taste and culture.

If from my life were abstracted the experiences and satisfactions I have enjoyed from varied labors, and which were wholly unknown to my brother, I should seem not to have commenced to live. And when I think how limited were the faculties my brother used in this life, and how much of his fine nature remained undeveloped, I can only hope there will be no Phonography and no unaccomplished Phonetic Reform in the other life to monopolize his intellect and heart.

THERE is a type of character occasionally met with in the world that is honest, direct, and gentle, but uncompromising; not often gifted with intellectual energy, and not necessarily deficient in this respect, but almost wholly without worldly prudence and that calculating circumspection which is born of experience. This typical character, which nineteenth century civilization tends to render still more rare, is yet without a name. We call its mental and moral opposite Sophist, or by its older form Sophister, that is, one who is plausible that he may impose, who would make the false seem true, and the worse to appear the better cause; the man whose ideal is the success of Number One. The simple, uncompromising, transparent type of character,—perhaps because it is so rare,—we are able to designate only generically, and call its exemplars the Unsophisticated. Sophists abound; sophistry is so pronounced a factor in the present stage of civilization, that worldly success is, perhaps, oftenest achieved in the degree in which man plays the sophist and the egoist. The leading motive in the Sophist is selfishness or egoism, as, in the Unsophisticated, it is often unselfishness or altruism. The Unsophisticated are often too independent and impractical to be safely held up as models. They are too indifferent to the customary and conventional to be always agreeable; too unconcerned about the opinions of others to win friends, and too truthful and honest to be successful in a worldly point of view; while the majority, who accept the established and customary as their guide, and who assume the all-roundness of judgment which experience brings to be the only safe rule of life and conduct, are apt to regard the Unsophisticated with more or less distrust, if not contempt.

The Unsophisticated seem to act from spiritual instinct rather than from reason or worldly calculation. Circumspect, prudential conduct is unknown to them. They were apparently born without the mental stratum in which it could thrive; hence,

kindly disposed persons are less inclined to censure the oddities and imprudencies of the Unsophisticated, than they are to tolerate the blunders of the worldly Imprudent. The Unsophisticated, so born, retain their unworldly nature and transparency of character in spite of all prudential teachings. They may, in youth, have been taught that it is wisest and best *not* to be unsophisticated, but to act, for example, towards superior people with a reserve and circumspection needless to be shown familiars; to behave differently in public from what they would in private; to bow low to rich and important people, whilst they might, with head erect, look squarely into the eyes of their equals. In vain are all such teachings. The Unsophisticated retain the unperverted suavity and transparency of childhood through life. In public and in private, towards youth and age, to patrician and plebeian, they are alike uncompromising and innocently fearless and genial. "It is easy in the world," Emerson says, "to live after the world's opinion; it is easy in solitude to live after our own; but the true man is he who, amid the temptations of the world, preserves with perfect freedom the independence of solitude." Isaac Pitman, from youth to manhood and through life to old age, naturally and unconsciously squared his conduct in accord with this golden rule. Some there are who regard the unsophisticated nature as a blemish, and the resulting conduct as distressing. But it may be that in some future and less artificial age, unsophisticated behavior will be the rule, and, if not entirely so, its manifestations will be regarded as a kind of decorative virtue, impressing people with a charm akin to that we experience in contemplating the added beauty which bloom gives to the peach, or with which the mind is gladdened when the landscape, relieved from the shadow of passing clouds, bursts forth in genial sunshine.

The Unsophisticated sometimes show a curiously complex character. Though they may be direct, simple, and gentle, they are sometimes persistent, and in a quiet way dogmatic and self-assertive. Of intellectual people, I have never known a more unsophisticated person than Isaac Pitman. He was unimpulsive and forbearing in word and action, always gentle and undemonstrative, yet he was self-assertive, and in the cause of truth, as it appeared from his point of view, he was quietly and unyieldingly aggressive. In his family he was wholly passive, and to domes-

tic differences, habitually non-assertive. In the daily conduct of his publishing business, when ten or twenty persons were working under his direction, he was a strict disciplinarian, but always showed a Christian poise of perfect self-control. With little or big annoyances, as they would appear to most, he was seemingly unmoved, and uniformly calm and considerate. A hasty word never escaped him, nor was he betrayed into petulance of speech by mishaps that hindered his work and wasted his means, though they might be censurable blunders which ordinary thoughtfulness would have avoided.

Unsophisticated people are liable to be betrayed into eccentricities of behavior to which the conventional world is apt to make objection. About a year after the publication of the first edition of Isaac's Phonetic Shorthand, and when I was about sixteen years of age, my brother came to Trowbridge, our native town, to deliver a free lecture on his newly-invented system. A good-sized audience welcomed him, and the lecture was measurably successful, but not on the whole satisfactory, as it seemed to me. I remember calling my brother to account, on our return home after the lecture, for his non-observance of what, to my youthful comprehension, appeared to be the proprieties of the occasion. This, among other things: towards the close of the lecture, after writing a passage which had been read to him to show the practicability of Phonography for verbatim reporting, he had laid his paper down on the table, and advancing to the front of the platform, while holding the pen in his hand and continuing his explanatory talk, had deliberately raised his swallow-built coat-tail, and, bringing it forward as far as its length would permit, had carefully wiped his pen before returning it to his vest pocket. On my reminding him of what I thought should have been avoided before a public assemblage, he smilingly said, "Why did I? Well, there was nothing else at hand to wipe it on;" and with that the unsophisticated soul disposed of the indiscretion as though it never had occurred, or, if it had, it was not worth recalling.

I retain to this day the remembrance of a certain uneasiness I felt during the greater part of the lecture. Isaac was not in the least nervous or awed by the audience. I remember thinking that had the assemblage been composed of the most awe-inspiring personages I had ever read of, such as magistrates, judges,

archbishops, princes, or kings, I did not believe my brother would have been in the least abashed in the delivery of his message. But there was little effectiveness in his utterances, and he lacked repose and dignity. His earnestness of speech was accompanied by a certain restlessness which made one wish that he knew the virtue of a pause. The gravest objection to the lecture, but one which I did not mention to him, was my brother's lack of a lecturing voice. He was unimpressive, because his voice lacked resonance, that quality which, when combined with agreeable modulation, makes public speaking impressive. Isaac's serious, retiring kind of life that he led as a youth had its disadvantages. It prevented the development of the vocal organs, which the shouts, loud talk of sports, and the aspirated speech of misunderstandings and quarrels of the average youth, are so well calculated to develop.

My brother's lecture recalled the dissatisfaction I felt the first, and only previous, time I heard him speak in public. When I was about ten or eleven years old I accompanied my father to hear Isaac preach from the Methodist pulpit of our native town. It was on the occasion of my brother's return home from school teaching, to spend his Christmas holidays. A sermon by Isaac was a great event in our family, for a Preacher was then considered a very important and imposing personage. From the time I was five years old I had been used to attend our parish church every Sunday morning, to join in the Episcopal service, and to listen to the sermons of our venerable rector, the poet, George Crabbe. Most vividly I recall his benevolent face and impressive figure, clad in his black silken robe, which brought his snow white hair into such striking contrast, and I never failed to be interested from the time he ascended the pulpit stairs to the close of his dignified, persuasive, and always brief discourse. On each Sunday evening, there being no church service, I as regularly attended, with my parents and the rest of the family, the preaching of our noteworthy, but somewhat unlettered, Baptist minister, who, with stentorian lung power and Bible-thumping earnestness, preached the doctrines of election, foreordination and free-grace, with a dogmatic impressiveness that permitted no questioning the truth and authority of his teachings. With such standards in my mind, I was much struck with the inadequacy of my brother's pulpit efforts. He was neither persuasive nor

dogmatic, only argumentative and earnest, in a schoolmaster sort of fashion. My brother's preaching was unlike anything I was accustomed to hear. It wholly failed to satisfy my ideal; it was not Preaching, but simply talking and arguing from a pulpit. He did little to comfort the good or terrify the bad, and the ungodly were but mildly cautioned; and I summed up the whole matter to my childish satisfaction by thinking, that he was altogether too young to occupy a pulpit, and that, however efficient he might be as a schoolmaster, he was a failure as a preacher.

Soon after the publication of Phonography, in 1840, under the stimulus and novelty of the Penny Postal system, then first established in Great Britain, Isaac Pitman's correspondence greatly increased. His promptitude and unfailing courtesy in answering letters, correcting phonographic exercises, and discussing points suggested for the further development of the system, naturally made him a host of friends and admirers in all parts of the land, some of whom occasionally found their way to Bath to see him and pay their respects. Highly as my brother appreciated the enthusiasm which the study of his invention not unfrequently aroused, so long as it was expressed in phonographic characters, its oral repetition he regarded as a waste of time; and, from his standpoint, this was a sin, and no more to be tolerated than any other hideous offense, such as smoking, extravagance, gambling in stocks, or gluttony! It was pleasant to note the unfeigned, brotherly cordiality with which a visitor would be received, but after the friendly greeting, when it was found that he had nothing special to communicate or discuss, it was amusing to note the unsophisticated friendliness with which the visitor, who expected to spend an hour, would seem well pleased and perfectly satisfied to take his leave after an interview of a minute or two. Visitors were always received in his office, which was in no sense a private one, for within a few yards were compositors at their cases and wood engravers, folders, and stitchers at work. Isaac usually stood at his desk, and after a cordial shake of the hand and a never-to-be-forgotten smile, he would talk with his visitor, pen in hand, a reminder, though not so intended, that an interrupted duty was waiting to be fulfilled. His lady visitors were not so readily disposed of, and, if at the expiration of about a minute and a half they showed no sign of leaving, he would, in the pleasantest manner,

set them to work! He would lead them to see that he was busy with his correspondence, proof reading, lithographic-transfer writing, or some other duty, as the case might be, and that they could help him in his work if they liked to do so, and of course they did. He would then give each a square of postage stamps, or a sheet of lozenge-shaped phonographic wafers, such as were then used for sealing letters before the advent of gummed envelopes, and, handing them scissors, they would be led to believe that by cutting them up for use, they would be doing something to aid in the spread of their beloved phonographic cause. Isaac would then seem to be relieved from all sense of intrusion, and would proceed with his work with his accustomed serenity, as if no interruption had occurred. When the sheet was cut the visitors would probably take their leave. A friendly smile and a farewell shake of the hand, on the part of my brother, would send them away with the grateful satisfaction those are said to experience who receive the papal benediction. It should be remembered that those were the days when a sheet of postage stamps had to be carefully separated with a pair of scissors, and before the discovery of the method of perforating the sheet of stamps with intersecting lines of small holes to facilitate their division,—the little thought that brought the inventor a large fortune. Few men could act as Isaac did without seeming to be discourteous and rude. But he inherited father's deferential courtesy towards women; wholly unconventional, but entirely frank, the promptings of an honest and loving heart, of which conduct is the outward and visible manifestation.

Isaac Pitman's unsophisticated performance of duty is told by one who had been a pupil in his school, at Barton-on-Humber, in 1835. He recalls that when he attended school, his master accompanied the marching of the boys through the little town by playing on the flute. The Barton school was conducted on the Bell and Lancaster system, in which my brother bad been trained at the London College. Being semi-military in its methods, part of its discipline was for the boys to leave school, after each session, in marching order, section after section, breaking ranks from the rear only when the boys arrived at a point nearest their homes. Isaac had been from his early days a successful performer on the flute, and for years before leaving home he and his elder brother, Jacob, were accustomed to lead the singing in the Sun-

day school with the strains of their flutes. To appreciate the Barton incident at its worth, it must be borne in mind that it was the period of high tension in my brother's religious experience. His serious and studious life, his fastings, self-denial, and strict religious discipline caused him to be ranked with his high exemplar, John Wesley. His marching in the ranks with his brigade of eighty boys, making them keep step to the strains of his flute, only shows that he aimed to perform a necessary duty in what he conceived to be the best way, and the thought that marching with the boys through the streets with his flute might excite ridicule probably never entered his mind, and if it did, it had no effect whatever in deterring him from using his instrument, if, by so doing, he could more efficiently drill his boys. It interests me to think that about the only tune I can recall that Isaac would be likely to play, which would satisfy his conscience, and be the right tempo for a marching tune, would be Handel's Harmonious Blacksmith, and the strains of this distinctly marked measure would have made marching an exhilarating discipline for the youngsters.

Very unsophisticated was it of my good brother to blurt out during service in an Episcopal Church his deep-rooted objection to the doctrine of the Orthodox Trinity. It was at Wotton-Under-Edge, after he had been expelled from the Methodist Church for his rejection of this tenet, and his acceptance of the teachings of Swedenborg. He had received a friendly call from the rector of the parish church, who invited him to attend the Episcopal service. I think it must have been the first Sunday of our attendance, and I remember that Isaac, accompanied by his wife, Henry, and myself, occupied the large and fine cloth-lined pew of the rector's family, immediately below the pulpit. The congregation, all standing, were responding to the Litany, and when the preacher came to, "O holy, blessed, and glorious Trinity, three persons and one God," Isaac said aloud, without raising his eyes from the prayer book, "Where is the scriptural evidence?" His words were sufficiently loud to be heard by the rector, and by all who were within a radius of fifteen to twenty feet. The rector took no notice of the interruption, but I remember blushing till I felt half suffocated, as, raising my eyes, I met the questioning glances of all the nicely-dressed people in the pews about us. A few days afterwards the rector made us a call. I happened to be

present, and was much relieved in mind at the easy and polite way in which he minimized my brother's unchurchly conduct, and at the same time lessened the formidable objections which Isaac seemed to have encountered in the Episcopal Doctrine as set forth in the church Litany. The rector's visit, I remember, impressed me because I thought that if the doctrine of the Trinity was not so very necessary to accept, then, probably, "the crafts and assaults of the devil, God's wrath, and everlasting damnation," as set forth in the prayer book, and which I had recited hundreds of times, might not be the tremendous verities I had been taught to believe, and possibly these terrors might be explained away in like manner, and in future, as the preacher recited the dreadful possibilities, I might with hopeful confidence respond, "Good Lord, deliver us!"

While I was attending Isaac's school at Wotton-Under-Edge, and living in his family, his unsophisticated nature led to an indiscretion oddly contrasting with the even tenor of his life and conduct. One of the largest cloth manufacturers in that part of the country unexpectedly failed, and everything he possessed was ordered to be sold. His residence, about five miles from Wotton-Under-Edge, was a place of note. The house was situated in a beautiful park, and the whole establishment was on a scale of splendor which seemed, to my young imagination, more befitting a prince than a cloth manufacturer. His horses and carriages were fine and numerous, and his wine cellar was so well stocked, that an entire day was devoted to its sale. Isaac never partook of wine, except in his pudding sauce, and of its presence there he was uninformed. Mrs. Isaac Pitman always kept a small stock of wine in the house for visitors, and for the itinerant Methodist ministers who, once a month, made their Sunday stay at our house while fulfilling their Sabbath duty. At his wife's request, Isaac attended the sale on the day the wines were sold, and I accompanied him. The sale took place in the stately dining-room, and would-be purchasers were seated on each side of the long, broad table that extended the length of the room. As each new variety of wine was offered for sale, and while its pedigree was told and its qualities extolled by the auctioneer, sample bottles were uncorked by attendants and passed down the table, and all who were disposed poured a little into their wine glasses to enable them to judge of its worth, and to guide them in their

bids. Plates piled with small cubes of old Cheshire cheese were plentifully supplied at regular distances down the table. Occasionally my brother would pour out a small quantity of some sweet variety of wine for my delectation. According to instruction, Isaac made purchase of only a case or two of sherry, and I imagine he would be guided by what the auctioneer said as to the age and quality of the wine, rather than by the judgment he himself would form from the sparing sips he took of the varieties offered for sale. It was on a pleasant Saturday afternoon that we left the grounds of that beautiful home, and no sooner had we reached the entrance gates than I was treated with a surprise. With an exclamation, which I can only recall as something like "Well, here we are!" or, "Here we go!" my usually serious brother, to my amusement and surprise, started off on a run with such frolicsome vigor that it taxed my utmost ability to keep pace with him. He kept up the race for more than half a mile, when he relapsed into a sober walk. Whether we afterwards went at our usual pace, or whether he lagged, whether we talked—for Isaac was accustomed to make walking the opportunity for pleasant and instructive conversation—or whether we were silent, I do not now remember; but well I recall that, on reaching home, Isaac retired to his room, and did not appear at the tea table, nor till after breakfast next morning. Mrs. Pitman reported that he had been sick.

The illness lasted but a few hours, and was the only lapse from his usual normal health and vigor I ever knew of. It was an incident that had no parallel in a lifetime, and, as well as I remember, it was never afterwards referred to. My unsophisticated brother had gained a little experience of the effect of mixed wines, even though partaken of but sparingly, and not for indulgence, but only in the simple line of duty. The promptitude and certainty of the penalty was a surprise, but, at this distance of time, has become only an amusing reminiscence.

Isaac Pitman never wore any personal adornments. Extreme Methodistic simplicity of attire was his unvarying rule. Black broadcloth, a swallow-tail coat, with a white cambric neckcloth, was his habit from youth to age. When the Queen conferred upon him the honor of knighthood, he was, probably, the only one of the small group who, on that occasion, knelt before

her majesty, to whom gold sleeve buttons, diamond studs, and patent-leather boots did not, though unconsciously, afford a certain moral support, trifles without which each would have felt himself unequal to the knightly ordeal! One of the distinguished group knighted on that occasion is reported to have said afterwards that it was the most trying and uncomfortable few minutes he had ever spent in his life. We can readily believe that Isaac Pitman was the only one to whom it was a season of anything approaching tranquillity. To each of the others knighthood was a distinguished and much coveted honor, and, no doubt, regarded wholly as a personal affair, a reward for ability or achievement; and recognition by so august a personage as the Queen of England, accompanied by so imposing a ceremony as laying the Sword of State on the shoulder of the average Englishman, was enough to crush out of him the last remaining spark of independent manhood. To my unsophisticated brother the ceremony must have been an agreeable comedy. Of course it was interesting and highly gratifying that the supreme personage of the realm should at length recognize the worth and utility of the child of his brain, whose development had caused him more than half a century of unremitting thought and labor, but the mere presence of the Queen would not be awe inspiring; the ceremony, as such, would not be disconcerting, and, of itself, would be unimportant. It was the recognition of his lifelong cherished idea that was important, and for this he was glad and grateful. It was an event that ought to happen, might happen, or might not; but, as it did, it was a cause for joy, and there was nothing in the event, beyond, perhaps, being a little too formally conducted, that was felt to be anything more than a pleasant thanksgiving ceremony.

At the royal luncheon, which followed, Isaac was the only vegetarian, and his abstemiousness is said to have given rise to the only little pleasantry attending the stately function. A well-bred vegetarian can always find sufficient to satisfy his needs at any well-spread board, without partaking of fish, flesh, or fowl; but we can easily imagine our unsophisticated vegetarian, after taking a survey of the ornamental and gustatory amplitude of the royal spread, quietly addressing the gorgeously attired lackey behind his chair with the request: "Will you oblige me with a buttered sandwich, with nothing in it?" And then, of the

consternation of that important personage, when he discovered that the royal larder did not contain it!

Those on whom the honor of knighthood was conferred were not required to appear before her majesty in the usual Court dress. At all other Court ceremonials the rule was enforced. A special exception, it may be remembered, was made in the case of Quaker John Bright, when he accepted a position in Gladstone's Cabinet. Had my puritanical brother been required to appear before the Queen in knee breeches, with a sword at his side, it is safe to say there would have been no Sir Isaac Pitman.

SOMEWHAT curious was the coincidence that just at the time when my brother first became absorbed in his life's work, when, seemingly, every thought and affection was devoted to the new-born child of his brain, that then should have commenced the one great and only love romance of his life. Though he was twice married, he had but one true love, and that escaped him. Isaac's adventure was an illustration of the rule that a true-hearted, conscientious man, however much he may respect conventional law and usage, will, in the supreme events of his life, be a law unto himself. My brother's married life was uncongenial, physically, intellectually and spiritually. He would have been less than a man, though, absorbed as he was in his special work, had his heart not yearned, perhaps unconsciously, for the solace, trust, and comradeship which only loving sympathy can bring. But his singularly pre-occupied life naturally suggests the questions whether a literary, artistic, or scientific man, whose all-absorbing thought, time and energies are devoted to some special life's work, should ever marry. It may be questioned whether men of the type and temperament of Sir Isaac Newton, John Wesley, John Ruskin or Isaac Pitman have any right to marry, or to ask a true woman to enter upon so one-sided and unfair a partnership as a life-long marriage. And, would a man whose intellectual and emotional nature is pre-occupied with some overmastering enterprise or vocation, and whose life is filled with resulting activities and duties, be likely to find a mate who could sympathize with him, and who would willingly, for love's sake alone, participate in a life partnership with a pre-occupied and devoted specialist? As readily could we imagine Joan of Arc with a satisfactory husband.

Some notable examples may be recalled of the worthiest of men, Michael Angelo, Swedenborg, Gibbon, Washington Irving, Buckle, Herbert Spencer, Phillips Brooks, Whittier, Thoreau, and others, who never married, for each seemed to realize that marriage, in his case, was undesirable because it would be unjust; his life's work would not permit of that personal devotion which the true wife expects and has the right to demand. John Ruskin realized this shortly after his marriage, and with rare, generous nobility, and in accord with his high ideal of duty, gave up the wife he had espoused to his friend Millais, who proved to be, as Ruskin believed, her true mate. The pure, earnest worker is possibly the one who most needs and craves the rest, peace, and delight of true comradeship and love; but too often he is unable, rather than unwilling, to pay the price in time and reciprocal devotion.

Precisely the same plea might be advanced with respect to women, for the day is past when men alone are pioneers in the march of progress. We are now face to face with a new, or, at least, an emphasized aspect of social life and its problems. Never before, probably, were the social, intellectual, and ethical inequalities of the civilized portion of the world as great as they are now, and the more keen-sighted and tender-hearted men and women are, the more readily will their chivalrous nature be aroused to do battle for the weaker side, and to aid with all their might in lessening the disparities and inequalities that divide the high and the low, the learned and the ignorant, the extravagant rich and the destitute poor, the wisely temperate and the debased intemperate, the Christ-like man and the Cain-like culprit. These anomalies in our civilization make philanthropists and specialists, the most worthy of living souls, and the most to be respected and revered of all the people on earth; but, from much experience, we prefer to admire them from a distance. Now to our story, which, had it prospered, might have controverted this fine-spun theory.

There lived a family at Wotton-Under-Edge with whom we were on terms of friendly intimacy. The younger portion of the family consisted of three sisters, who were interesting and intelligent. They conducted a young ladies' school. The eldest was my drawing teacher, and though more than three score years have passed since then, I feel a glow of gratitude as I recall the gentle

patience with which she encouraged me to do painstaking work. The youngest, M—, came to live in our family as a companion to Mrs. Isaac Pitman. She was then about seventeen; a girl of a very lovable type; intelligent, emotional, but unassertive; of pleasing countenance rather than beautiful, and with a smile that lighted her face into perfect loveliness. She had been taught to pronounce correctly, and her voice being low and sweet, and her intonations smooth and caressing, her speech was very winning, for, in addition to its emotional quality, it had the charm of refinement and precision. Isaac seemed to pay no more attention to her than to us boys. M— lived in the family for about a year. The three sisters then moved to a northern town, where they established a larger ladies' seminary. I visited them some years after, and I found their home a charming example of quiet elegance and refinement. I returned home to Bradford and remained nearly two years, when Henry and I went to Bath to serve an apprenticeship under Mr. Lewis, the city architect, to study carpentry, building, and architecture, with the intention of joining our brother Jacob, who was then a builder and architect in Australia. Isaac had now removed to Bath, and had established a private school there, and Henry and I again became members of his family. I soon found that Isaac kept up a correspondence with M—, and occasionaly he would say, with an eye-lighted smile, "Here is a letter from M—," handing it to me, or reading an extract from it. That the letters were something more than friendly, is shown by the domestic upheaval which soon occurred. A package of M—'s letters in some way came into the possession of Isaac's wife, and revealed the fact that there had been a regular exchange of heart secrets between them. Mrs. Pitman was unable to read Phonography, and she had to avail herself of the knowledge of one of Isaac's schoolboys to decipher and make extracts from the letters. Armed with these she proceeded with a determination born of a supposed wrong to see the two ministers of our church, Mr. J. B. Keene, who was the able editor and proprietor of the Bath Journal, the leading newspaper of the city, and his associate minister, Dr. Barnes. The result was that the matter was laid before the trustees of the church at two separate meetings, Isaac and his wife being present. I know nothing of the proceedings beyond what was afterwards quietly told, that the judges of Isaac's conduct were so firmly persuaded of the

purity of his motives and sentiments, the innocence of his imprudence, and the virtue of the charged immorality, that he was cautioned rather than censured, and with that the matter ended. The only effect at home was that we were for a time all somewhat reserved at our meals, but soon life seemed to glide on in its customary routine of smoothness and regularity.

The heart-friendship between Isaac and M— did not cease with this eruption. After eighteen months in Isaac's family, I left Bath to assist my brother Joseph, who had just started in the north of England, in the promulgation of Phonography by lecturing and teaching. Soon after I left Bath I was made one of a circle of four who contributed to a phonographic ever-circulator, and who were the only confidents in Isaac's love secret. In addition to Isaac, M—, and myself, there was a friend of M—'s, a lady of great intelligence, sweetness, and worth. I need say nothing more of her than that she was the loving wife of a professional man, and that Ralph Waldo Emerson, when he was on his 1846 lecturing tour in England, was a guest at their beautiful home for the two or three days that he remained in their city. Isaac's life at this time was as full of active, never-ending work as ever; but this ever-circulator seemed his only joy, all the rest of his life was duty, necessary and pleasant, but still *duty*, and lacking the emotional ecstasy which the thought of M— inspired.

It was when I was lecturing and teaching in the old city of York (1848) that an arrangement was made for Isaac and his love to meet at my rooms, when they would see each other for the first time for three or four years. Isaac might have been on a lecturing tour, of that I am not certain, but M— had to travel at least fifty miles to reach York. The meeting was the mutual clasping of hearts, compared, on my brother's part, to what a loving mother might feel for her only child from whom she had been separated for years. But it was something more; it was the hungry soul feasting, for the time, on the sweet consolation of sympathetic companionship, of which, in his ordinary life, he was denied. If ever there was an ardent, spiritual love from which earthly passion was eliminated, I believe this was one. The meeting was only for a few hours, when they took the train for their respective homes. After I was married, my wife knew of Isaac's affection for M—, and rejoiced in the knowledge of it. I left England for this country late in 1852, and Mrs. Pitman died

in 1854. In 1857 Isaac was again married, but not to M—. My amazement was great. There seemed to be no satisfactory explanation beyond the possible interference of the two older sisters. Up to that time Isaac's income from Phonography was scarcely enough to pay his living expenses; in other words, all that Phonography was earning, and much borrowed money, Isaac was spending on his costly phonotypic experiments. Love for the younger sister, dread of separation, fear, nay, a seeming certainty that her life would be a struggle with poverty, were deemed sufficient reasons for insisting on delay, and certain persuasive tactics at Bath, which I only knew of afterwards, proved effective in breaking off as pure and sacred a love as I have ever known, leaving my unwary brother to venture on a second marriage, which, unhappily, proved a reminder of the Paradise he had sought and lost.

AS early as 1845 or '46 the returns from the sales of Phonographic books must have yielded my brother a sufficient revenue for a frugal living, and for the gradual increase and betterment of the means for carrying on his publishing business. But the income derived from his books was all absorbed by his Phonotypic experiments; and how those varied, and how constant were the changes and fancied improvements in the forms of the new letters, is abundantly shown in his weekly Phonetic Journal, from 1844 to '56. Few persons have other than a faint idea of the thought, labor, and cost of adding new letters to the alphabet, and Isaac Pitman's scheme required at least seventeen to complete an alphabet of forty letters necessary for the correct representation of English. Each letter required steel punches to be cut, and matrices to be made for lower-case, capital, and small caps, as well as capitals and lower-case forms for Italic letters; script, as well as Roman forms, would, of course, be ultimately required for the added letters, and all these would be necessary to complete one font, or size of type. I believe my brother's printing office contained, in 1855, five fonts of phonetic types of different sizes, and at the time of his removal from Albion Place (the office I knew before leaving England) to more commodious quarters in Parsonage Lane, in 1855, he speaks of having "to pack up, haul, unpack, and rearrange from fifteen to twenty tons of type, printing apparatus, books, and office furni-

ture." To pay for his costly experiments, more abundant means were needed than were furnished by his own income, so he established the Phonetic Fund, to which all interested in the attempt to secure a rational orthography were invited to contribute. This fund, in December, 1852, amounted to nearly five thousand dollars. He also borrowed from confiding friends sums varying from £100 to £200, till, in 1858, he was over £2,000 in debt. Sir Walter C. Trevelyan, who was a liberal and devoted friend for twenty years, was one who never consented to receive interest on his loans. Neither he nor anyone else ever asked for any security for their loans beyond my brother's word.

In 1859 some of the more earnest friends of the Phonetic Reform, who knew of Isaac's self-sacrifices in carrying on his costly typic experiments, proposed that a public subscription should be raised to aid him in his efforts to perfect the alphabet. Rev. Cyril H. E. Wyche, of London, who took the lead in the matter, wrote to Isaac asking if a money testimonial would be agreeable to him, or in what form their appreciation of his labors would be most acceptable. My brother regarded Mr. Wyche's announcement of the generous intent of the phonographers of that day as "one of those rarely occurring events in life in which we recognize the Angel of the Divine Providence as soon as he is at our side." He would, he said, gratefully accept aid, in that it would help towards building a Phonetic Institute—a suitable home for Phonography and Phonotypy—and afford the much needed facilities for carrying on the work to which his life was devoted. To show the urgency of this want he said: "It is only necessary that I should refer to the buildings that have been successively occupied for this purpose. From 1837 (the date of the first edition of Phonography) to January, 1846, I put out my printing. I then set up a press in one of the rooms of my own house, 5 Nelson Place, and used two other rooms for compositors and a bindery. In January, 1851, to obtain more room, I removed to 1 Albion Place, Upper Bristol Road (Mr. Ellis's printing office from 1847 to 1849), where the business was carried on, under many inconveniences, in four rooms. In March, 1855, I removed to this office in Parsonage Lane, where I have sufficient room for my present business (but not for much increase), and on a single floor, but I can say nothing else in favor of the place. It is situated in the only filthy lane I have seen in this clean and beau-

tiful city of crescents and squares; and the pollutions are not physical alone, but moral also, for on the other side of the narrow lane, two or three steps from my office door, the 'social evil' festers. The dimensions of my office are 53 feet by 28. It is the top floor of a block of buildings occupied principally by cabinet-makers. The rate of insurance is thus so high that I have not insured my stock of type and books. The ground floor has a large gateway leading to a pig slaughterhouse that lies at the back; there is another pig slaughterhouse in the front of my office, and a sheep slaughterhouse, that does a great deal of business, next door. Of course, noisome smells often arise from these places, and sometimes they have been pungent enough to drive everyone out of the office. The room itself would be more correctly designated a barn than a printing office. During the first two years of my tenancy, one-half of the room was not even ceiled, and I had nothing between me and the sky but an old shattered tile roof that constantly let the rain in. This room is an addition to the original height of the house, and the walls are only six inches thick. Placed thus within thin walls, under an immense tile roof, we are exposed in summer to excessive heat, and in winter to excessive cold. I have scarcely been free from a cold since I entered this place. Only in the spring and autumn can I do a fair amount of work for the number of hours I spend here. Often, in the evening, when I am the sole occupant of the office, a company of rats will scamper across the floor to amuse me. There is not another place in Bath to which I can remove, nor have I been able to find one elsewhere."

It was thought that £1,000 would be raised, but no great publicity was given to the affair, and the subscription stopped at £350, which was presented to my brother at a meeting held in London, in June, 1862. Accompanying the check for this sum was a fine marble time piece, on which was inscribed: "Presented, with a purse of £350, to Isaac Pitman, the inventor of Phonography, by many friends of the Phonetic System, in token of their high appreciation of its many excellences, and of his untiring labors in its extension.

It is hard to realize the fact that tens of thousands of pages of delicately-written lithographed Phonography, the faultless hand-printing of his Weekly Journal, and his other numerous publications, and the countless neatly written phonographic let-

ters, came from this barn-like office, with its wretched surroundings. In 1867, after an occupancy of eighteen years, Isaac Pitman's lease of the Parsonage Lane premises expired. The spread of Phonography, the general interest in the phonetic experiments, and the increased demand for Phonographic and Phonetically printed books, were such that the one "big barn-like room" was felt to be ill-adapted to the requirements of my brother's extended business. In his desire for a suitable Phonetic Institute, which would give larger and healthier quarters for himself and his eighteen workmen, he appealed for help to the English Phonetic Society, now numbering upwards of four thousand members. After describing the wretched environment of the Parsonage Lane quarters, its insufficient accommodation, its leaky roof, its thin, damp walls, and consequent damage to his books, as well as its general discomforts to his workmen and himself, he said: "From the year 1837, when Phonography was invented, to the year 1843, when I gave up my private day-school in order to live for and by the Writing and Spelling Reform, I occupied all my spare time before and after school hours in extending Phonography through the Post, and by traveling and lecturing during the holidays. In this period I gained nothing by my system of Shorthand, but spent all the proceeds of my books in extending their circulation. From 1843 to 1861, I labored at the cause from six o'clock in the morning till ten at night, and literally never took a day's holiday, or felt that I wanted one; and I worked on till 1864 without the assistance of a clerk or foreman. During this period my income from the sale of phonetic books, after paying the heavy expenses connected with the perfecting and extension of Phonetic Printing, did not exceed £80 per annum for the first ten years, £100 for the next five years, and £150 for the next three years. During the first of these periods I was twice assessed for the Income-Tax. I appealed, and proved that my income was under £100. The commissioners appeared surprised that I should carry on an extensive business for the benefit of posterity. From 1861 to the present time my income from Phonography has been sufficient for the expenses of my increased family, but not more. If phonographers think that this labor, extending over the best part of a life, has been productive of pleasure and profit to them, and to the world at large, they have now an opportunity of placing me in a position to carry on the

work of the Reading, Writing, and Spelling Reform more effectually. That which is done promptly is generally done well. Let us all labor in the eye of the motto—'The Future is greater than the Past.'" He headed the subscription with the £350 presented to him in 1862. Sir Walter C. Trevelyan gave £100, and other smaller sums soon raised the fund to £1000. After many fruitless attempts to obtain suitable premises, or a site on which to build, he was fortunately enabled, at an extensive sale of property belonging to Earl Manvers, to purchase a substantial stone structure of five stories, including basement, almost in the center of the city, for the comparative low sum of £600. The building was sold as two houses, but it had a central entrance, a spacious hall, and a staircase twelve feet wide, and was originally built and occupied as one house. It took nearly six months of work, on the part of masons and carpenters, to transform the Kingston Buildings, as they were called, into a Phonetic Institute. Towards the close of '74 the removal from the high room of Parsonage Lane had commenced, and a repetition of the packing, hauling, unpacking, and rearranging of 1855 took place, and though the task was more formidable than before, it was gladly undertaken. The interruption to Isaac's correspondence, and the temporary delay in issuing the Phonetic Journal, resulted in the accumulation of piles of letters, till it seemed a little army of clerks would be required to bring up arrears. But the indefatigable worker, single handed, was equal to the task; and soon things went on smoothly and swimmingly in the new quarters. But other and more perplexing difficulties had to be encountered. At the Parsonage Lane establishment only hand-presses were employed. For the new building Isaac Pitman purchased a "Blaten" printing machine, which would print six hundred sheets per hour, a great advance upon the hand-press, on which a man and a strong boy could print not more than five hundred sheets per day. To drive the new press, he placed in the basement of the building a two-horse vertical tubular engine; but it soon proved insufficient, and was replaced by a four-horse horizontal engine. Gratefully as my brother appreciated these new facilities, he soon encountered unlooked-for troubles. We quote from the Phonetic Journal of 8th May, 1875:

"The friends of Phonetic Spelling who see this journal have sympathized with us in our trials for the past six months, with

respect to the labor we have undergone, the great expense we have incurred, and the annoyances to which we have been subjected in our attempt to introduce into the Phonetic Institute a steam engine and printing machine. These troubles have arisen from two sources: first, the difficulty of getting our machine to work at all, through our having been deceived in the purchase of an engine and boiler that eventually proved not worth the cost of erection; and secondly, after we had a new boiler and engine made, the machine was pronounced a 'nuisance' to our neighbors. We removed it to another part of the building, to pacify the neighbor on one side, and then found that its sound could just as well be heard by the neighbor on the other side, who is much more exacting in his demands. Nothing less than a payment of £150 cash, and the engine to be entirely stopped between the hours of twelve noon and 1 P. M. each day, or still more severe terms in our taking off his hands the lease of his house, will satisfy him. 'These are the only terms which can be entertained,' says his solicitor. Of course we do not entertain them, but stopped our machine immediately on receipt of his solicitor's letter, and just as this journal is going to press. The masons have now (1st May) been working two months in laying down the new boiler, removing the machine, and making the necessary alterations in the premises, and will finish their work in another day; and the engineers were employed three weeks after the engine was made; and just as the work is finished we find that all the labor and money is thrown away—for the present. We shall now have to print a journal of eight pages at a hand-press as formerly, till something shall turn up, either here or in some other premises, so that we can employ steam power, and it will not be voted a legal nuisance."

THE year 1887 completed the fiftieth year of the life of Phonography. The inventor still lived, and among the tens of thousands who had been benefited by the use of his system, there were many who thought it would be most fitting to celebrate the jubilee of an art whose utility was recognized in every country where the English tongue is spoken. It was, moreover, just three hundred years since Dr. Bright's famous first work on Shorthand was published; so it was resolved, March 3, 1886, at a meeting of the council of the Shorthand Society,—a body representing the writers of all systems of Shorthand,— to hold a Jubilee in London, in recognition of Isaac Pitman's invention of Phonography, and of his fifty years of labor for its development and dissemination; and that advantage should be taken of the event to call an International Gathering of Shorthand writers of English and European systems of Shorthand, to celebrate the Tercentenary of the origination of modern Shorthand by Dr. Timothy Bright, in 1587.

Mr. T. A. Reed and Dr. Westly-Gibson (author of The Bibliography of Shorthand) were appointed Chairman and Secretary, and these gentlemen took an active lead in making the event the interesting success it proved to be.

The preliminary announcement said: "It is proposed to hold in the Autumn of 1887 an International Congress of Shorthand Writers, of all existing systems, and of persons

interested in Shorthand generally, to celebrate conjointly two events of importance. (1) The Jubilee of the introduction of Mr. Isaac Pitman's system of Phonography, marking, as it does, an era in the development of Shorthand on scientific principles. (2) The Tercentenary of modern Shorthand, originated by Dr. Timothy Bright, about 1587; continued by Peter Bales, 1590; John Willis, 1602; Edmond Willis, 1618; Shelton, 1620; Cartwright, 1642; Rich, 1646; Mason, 1672; Gurney, 1740; Byrom, 1767; Mavor, 1780; Taylor, 1786; Lewis, 1812; and many others in past generations; and finally by Mr. Pitman, and other English and Continental authors of the present day. It is hoped that the combined movement will bring together a large assembly of Shorthand writers, professional and otherwise, who will be willing to work fraternally and earnestly in the interest of the science-art which has for three centuries been a power in the world and a blessing to mankind."

After a brief resume of the history of the invention, development, and spread of Phonography, and a reference to the labor and sacrifices of the inventor in bringing his system to completion, the prospectus continued:

"Like so many inventions, Phonography appeared at the time when it was specially required. The rapid development of the newspaper press created a demand for Shorthand work which had never before existed; and a still wider and more general field was open in large commercial and legal offices, where the value of skilled phonographers was gradually recognized, to such an extent, indeed, that their employment is regarded as a matter of absolute necessity. Increased facilities were offered to students for reporting lectures and copying extracts; and for friendly, social, and intellectual intercourse, the new medium of communication was hailed with gratitude by thousands. It is needless to add anything as to the position which the system now holds in every English-speaking-and-writing community. Every lover of phonetic spelling will readily recognize the services which Mr. Pitman has rendered in that direction through the medium of his system. In no more effective way could the phonetic principle be applied than in a system of Shorthand, daily and hourly used throughout the country. No longer the dream of the philologist or the educationalist, the principle has received practical embodi-

ment and application in Phonography, and the attention of the public has thus been aroused, to an extent that could hardly have been attained by any other agency, to the defects and inconsistencies of English orthography, and the necessity of removing them. It is believed, therefore, that all phonetic reformers will willingly join in some enduring memorial, which it is proposed to make in honor of Mr. Pitman.

"A Congress will be held in London, at which papers will be read and discussed dealing with the history, development, and literature of Shorthand, from Bright's days to Pitman's; also with matters of a more practical nature, bearing upon the present and future of Shorthand, and the prospects of the art generally. In connection with the Congress it is proposed to hold an Exhibition of Shorthand works of every description, including books, written and printed in Shorthand, stenographic curiosities, and other objects of interest. There will also be opportunities of social intercourse; and every effort will be made to render the occasion a memorable one in the history of the art. Whatever funds may be collected will, after paying expenses of the Celebration, be devoted primarily to some method of recognizing and perpetuating Mr. Pitman's name and services, his own wishes being consulted as to the precise mode of application."

The Phonographic Jubilee was a gathering of the representatives of Shorthand systems from all parts of the world, France and Germany being especially represented. The Congress was held at the Geological Museum, Jermyn St., London, by special permission of the Lords of the British Council. Five days were devoted to topics of general Stenographic interest, and one day was specially reserved for the celebration of the Jubilee of Phonography. Lord Rosebery presided and delivered the inaugural address. He spoke eloquently of the utility and value of Shorthand for professional and literary purposes, and of its great importance as a time-saving instrument in the ordinary business affairs of life. He referred to its use in the public Government offices, and that he had, when in office, frequently urged its employment on the score of economy, and as a means of securing more efficient service. So essential had Shorthand become to the press, in business, in judicial, and in Government affairs, that if by any auto-

cratic power its employment were to be suspended for a week, he could not, by any stretch of imagination, conceive how the world could get along without it. Growing lads, he said, should be reminded that a knowledge of Shorthand was indispensable in a mercantile career, and to all who aspire to clerical and secretarial posts.

Wednesday was devoted to the Phonographic celebration. At the morning conference, Isaac Pitman read a paper on "The Spelling Reform, and How to Get It;" in the afternoon he contributed a paper on "The Genesis of Phonography," giving some of the details of the construction and development of Phonography already mentioned in these pages. He said he was able to fix the exact date of the publication of Stenographic Soundhand from a letter dated 14 of November, 1837, written to Mr. Samuel Bagster, the London publisher, which accompanied a consignment of two hundred copies of his little book, out of three thousand, of which the edition consisted.

It cannot be stated with certainty, but I think this was the entire number of the crude little pamphlet that were ever sent to the eminently respectable London publishing house. The remainder were sold by my brother, or were given to friends and correspondents for their use and for free distribution; for it was not long after its publication before it was seen how vastly the scheme could be improved, phonetically and stenographically, as is shown in the edition of 1840, which was completed in all its essential details early in 1839.

The chief event of the Phonographic Jubilee was the evening meeting, when the theatre was crowded with enthusiastic phonographers from all parts of the country, to witness the unveiling and presentation of a marble bust of Isaac Pitman, the work of the distinguished sculptor, Thomas Brock, R. A. The author's long-time friend, Mr. T. A. Reed, was selected to make the presentation. When the cheering subsided, Isaac Pitman said: "Mr. Chairman, and my dear and affectionate friends, there is a passage in the Divine Word that has rested upon my mind for a month or two as one that I could use on the present occasion. It is a divine inquiry submitted to us to institute a kind of self-introspection and self-examination. It runs thus: 'Seekest thou great things for thyself?' If we put that question to our own hearts, I think

there are very few of us who can say that we do not. The inquiry is followed by a positive command from the Maker of the Universe, 'Seek them not.' I have quoted this portion of the Divine Word for the purpose of saying that, consciously, that passage has been my guide from my youth up. Tonight, instead of feeling that I am a kind of Roman citizen, and that you have placed a civic crown upon my brow, I rather feel in the condition of a criminal arraigned before this Court on the charge of having sought great things for myself. I fancy to myself, somehow, that our venerable chairman is the Judge. If he were but bewigged, which would well become him, he would be an admirable Judge. And my friends upon the front row seem to me to be the jury—the Grand Jury— and the seats behind, filled with the public, are the audience; and now I stand before you in some sense as a criminal arraigned before the world for having sought great things for myself, and I must, from my heart, declare myself 'Not guilty.' If you, in your clemency, come to the same conclusion, I shall go from this meeting a happy man. And then to turn to this bust; a doubt is suggested to my mind, somehow, and I cannot get rid of it. I have some hesitation in deciding which is the man and which is the image. I must really appeal to Mr. Brock. (Mr. Brock answered with a smile.) I think this (pointing to the bust) must be the man, such as he ought to be for purity and beauty, and this (pointing to himself) the imperfect image. I only wonder how my friend Mr. Brock could have made such an image from such a subject."

After alluding to the necessity for a brief alphabetical system of writing, he said: "My object in life has been to make the presentation of thought as simple of execution and as visible to the eye as possible. Fifty years are a long time in the life of a man, and I have prosecuted my labors for that length of time, and though I cannot say that we have got in Phonography the best Shorthand outlines for every word, I do maintain that we are not very far from it. I think that the only thing that remains to be done is to select any words that are not facile and beautiful in form, easy of execution by the reporter's hand, consider them and put them in the best possible form, and then we shall have completed our work." After a reference to the Spelling Reform and its great desira-

bility, he said: "Well, my friends, I accept these beautiful gifts with the deepest and most affectionate gratitude of which my nature is capable; they shall be a stimulus to me to work on in the same line, but, if possible, with increased diligence and faithfulness."

Mr. Pitman was the principal guest at the luncheon given to the members of the Congress, at the Mansion House, by the Lord Mayor, Sir Reginald Hanson, who had been instrumental in introducing Phonography as a study at the City of London School. In proposing the toast of the "International Shorthand Congress," the Lord Mayor coupled with it several well known names, the foremost being that of Mr. Pitman, with which, he said, he had been familiar from boyhood. It had been a matter of pleasure to him to follow the expressions of sympathy and good feeling from those who had studied his system and had presented him with a testimonial of their esteem.

The proceedings of the Jubilee Celebration were very fully reported by the London Times, and by other metropolitan papers, and more general attention was called to the educational and commercial uses of Phonography than by any previous occurrence in the history of the art. The proceedings of the Congress were published in London, making a volume of 460 pages, together with an appendix of 48 pages, giving a catalog of 1451 volumes of Shorthand systems, pamphlets, and periodicals, etc., of the history, use, and extension of the art in English, French, and German.

America's contribution to the Jubilee was a handsome Gold Medal, which was struck to commemorate the event. The address accompanying it expressed the high esteem of American phonographers for the inventive genius that had originated and developed so admirable and useful an art of expressing thought; for Phonography was a system of Shorthand founded on scientific principles, and unfolded in systematic arrangement and analogic harmony. It was the first in which the simplest signs were employed; the first in which cognate sounds were represented by cognate signs; the first in which those elementary sounds admitting of classification in groups were represented by groups of analogous symbols; the first in which the attempt was made to give circles, hooks, and loops distinct offices for efficient service in the stenographic art. By it the

language was for the first time successfully presented in Shorthand on a phonetic basis, and one who could read it could hardly fail to know the spoken words.

The address concluded with the sincere wish for "your health, happiness, and prosperity during the remainder of your career on earth, and that your life may be spared as long as existence shall be a pleasure to yourself and add to the happiness of others."

The address was signed

EDWARD F. UNDERHILL,
ELIZA B. BURNZ,
JAMES E. MUNSON,
} Committee.

Subsequently Isaac Pitman was the recipient of another testimonial, on this occasion from his fellow-citizens of Bath. It consisted of a replica of Mr. Brock's Jubliee bust, which my brother consented to receive on condition of its being accepted by the Literary Society of Bath. The meeting was held at the Guildhall, under the presidency of the Mayor of the city. The presentation was made by Mr. Murch, who said: "As an old inhabitant of Bath, representing the friends whose names are inscribed in this book, and indirectly a much larger number, I beg to offer this bust for your acceptance. We have heard of your kind intentions respecting it. We are glad to know that it will find a congenial home within those walls where we have so often met you. We hope it will be generally thought that the sculptor has shown his accustomed skill and increased his well-known reputation. We believe that to your fellow-citizens, to the young, especially, it will be a valuable memorial of one who, through a long and useful life, has gained their sincere respect, and set an example of intelligent, benevolent perseverance. May you still be blessed with health and strength for many years to continue that example, to share the well-earned pleasures of old age with those who are near and dear to you,—'love, obedience, honor, troops of friends,'—and to benefit mankind by hastening the time when knowledge shall cover the earth as waters cover the channels of the deep." In acknowledging the testimonial, Mr. Pitman said: "If I were a Stoic, a neat sentence of thanks might suffice for acknowledging this beautiful gift. But I am not a Stoic. I am deeply moved by the kindness of the friends who have subscribed to

this testimonial. Whatever of honor there may be in this presentation, I refer it not to myself, but render it to the Lord, to whom all honor belongs. The Literary Institution has kindly offered to accept the bust, and place it in the reading room, and I have much pleasure in asking Mr. Murch, as the representative of the Institute, to accept it. I like to think of English literature under the form of a vast temple, with a portico supported by two pillars, on one of which is inscribed the single word, 'Letters,' and on the other, 'Numbers.' The temple is adorned with statues of men, English and American, who have made the literature, the science, and the art that now illumine, beautify, and bless the world. No one is permitted to pass the portico of this temple who is ignorant of letters and numbers and their combinations. These little marks, '*a*, *b*, *c*'; and '1, 2, 3,' that seem in themselves to have no more meaning than the marks of birds' feet in the snow, are really the foundation of our civilization. There can be but little trade and commerce, and no literature, without these seemingly insignificant signs. In the use of figures we are consistent, but in the use of letters we are inconsistent. Figures always represent certain quantities or numbers, but letters are used arbitrarily, and long and weary is the task to find out what they mean." Mr. Pitman spoke at some length of the necessity and importance of the Spelling Reform, referring particularly to what Max Muller called the "unteachable" character of English orthography, and to the pitiful waste of time to which the young were subjected in attempting to master its difficulties and absurdities.

Early in the following year a gold Jubilee medal was presented to Isaac Pitman at a public dinner in London, under the presidency of Hon. Viscount Bury. "Fifty years ago," said his lordship, "Mr. Pitman found Shorthand in a very chaotic condition; and the man who, out of such elements, could evolve a system which was brief, rapid, legible, and easily acquired, and which has so quickly taken the foremost place among Shorthand methods, must be a remarkable man. But he has done more than that, for, by his indomitable energy, he has brought his system to such a position that the little seedling which he planted fifty years ago is now spreading its branches over the civilized world." In his acknowledgment

of the kindly feeling of his Phonographic friends, Mr. Pitman said that he was able to announce that Phonography had been adapted to the Malagasy language by the Queen's Private Secretary, who reported the speeches of the House of Representatives in Madagascar, and who was holding weekly classes for instruction in Shorthand. He also alluded to the adaption of Phonography to Spanish and Dutch, and was sanguine enough to avow his belief that the Phonographic art would, in time, be adapted to all languages, founded, as it was, on principles of universal application.

ISAAC PITMAN has been charged with being "relentlessly strict" in suppressing any infringement of his phonographic copyright; "so particular, indeed, that many so-called infringements were considered by legal counsel to be untenable, and were not persisted in, in order to save the long and harassing process of legal procedure." (Wm. Hope, *Phonographic World*, February, 1897.) The retention of his copyright was a struggle for something dearer than life; for my brother deemed its control essential to the completion and general acceptation of his all-important ideal—the universality of Phonetic Writing and Printing. On every point but this Isaac was the embodiment of generosity, but any encroachment on territory sacred to his cause and secured to him by legal rights, he resented with judicial severity. When I began publishing phonographic books in this country, he would not allow me to send instruction books to friends in England, though my object was simply to show my work and method of presenting the system. In a letter bearing date of 11 November, 1856, in referring to some of my first editions, which I had sent to my brother Henry, Isaac wrote: "I do not know what books you have sent to Henry. If there were any Manuals, or any books whatever for teaching Phonography, please send no more, because it is dishonest for any American publisher to send phonographic books to England, where the work is copyrighted, and would take away my sale of the work." That

this prohibition did not proceed from actual selfishness, is shown by the following extract respecting copyright infringement. Isaac's letter is dated 30 October, 1852, only a few months before I left England: "Three serious attempts have been made to rob me of the copyright of Phonography in this country, not to mention Henry's threat when he was in Darlington." [If Isaac would not print some phonographic exercises which Henry desired for the use of his pupils, he would do it himself.] "First Cassell, then Withers, and now Heath, of Nottingham, publishes a circular for getting pupils among the respectable classes, and announces the publication of 'Familiar Lessons in Phonography, or Phonography Taught without the Personal Attendance of a Master, price three shillings.' I shall stop it. If it were not that Phonotypy needs the profits of Phonography, I should directly throw the system up to the booksellers, and earn my living by teaching; but I can do nothing for Phonetic Printing if I do not preserve to myself the profits of my three Shorthand teaching books. I wish I could secure the copyright of the system for you in America, but there is no possibility of doing it, and you must depend on the sale that is to be got by your issuing good books, and moderately cheap."

My brother's rule to stay any procedure, which, from his standpoint, might imperil his copyright and hinder, as he thought, the success of the phonetic reform in Great Britain, occasionally worked great injustice to me and my friends on this side of the water. An American phonographer, wishing to repay some kindness on the part of a friend, a professor in the Edinburgh University, sent, for his acceptance, a parcel of phonographic publications. Among the books were my Manual and Reporter's Companion; the result was that on its arrival at Liverpool, the whole package was confiscated, and, according to standing instructions received from my brother, was committed to the flames by the custom house officials. Books of engraved Phonography, illustrative of the system that I may have issued, such as the Book of Psalms, History of Shorthand, Manners Book, etc., my brother would not have hindered; but if the parcel contained any instruction books, thus interfering with his copyright, *the whole package* would be condemned and burned.

Still more extraordinary, considering the endeared relations

we held towards each other during all our previous lives, was my brother's conduct, and the method he adopted to bring me to terms, on account of my rejection of his injudicious and much-repented-of changes in the system,—the use of large initial hooks on curved strokes,—which he introduced into the English text books in 1862;—the very changes which he labored so energetically during the last six years of his life to expunge from the system as a "defect" and "a blot!" So thoroughly was he convinced, at the time, that it was an improvement,—and being such that it was my duty to accept and advocate it,—he sought to force me to accede to his views by supplying *his* books to teachers and others in this country and Canada at one-third of the English prices. This was done to suppress my publications and to secure, if possible, the exclusive sale of his own instruction books. Equally convinced was I that my brother's proposed changes were wholly undesirable, and this view of the case was entertained by the great body of American phonographers, to whom it appeared a backward step.

The impersonal manner in which Isaac regarded this persecution, as it seemed to me, is shown in a letter of 25 May, 1883, when his forced attempts to suppress my books had continued many years. After referring, in no unfriendly terms, to several matters, he writes: "As to the main topic of your last letter, my selling books to American customers at one-third English prices, you must remember the reason for it, namely, to institute one style of writing in the two countries. If you can point out any other and superior plan I will adopt it. When the end is accomplished I shall give up the practise." This letter commences "Isaac to dear Benn," and the phonographic word "farewell" is crossed with a double fraternal kiss—a bit of phonographic freemasonry which most phonographers will understand—showing undiminished love for me personally; but my phonographic heterodoxy he would not tolerate. Additional proof of the absence of any unbrotherly or unfriendly feeling on his part is shown in a letter written one year before this, 14 June, 1882. "My plan of supplying American and Canadian phonographers with my phonographic books at one-third price for the purpose of establishing one style of writing on both sides of the Atlantic, has succeeded.

It is impossible now for either of the three variations of Phonography, in addition to your own—Longley's, Munson's, and Graham's—to stand against the English presentation of the system. My trade with America and Canada has become so large, every day bringing me orders, and sometimes ten letters in one delivery, that I want to be relieved of this labor by giving the trade in books into your hands."

In spite of the drastic measures on the part of my brother, and the sacrifice it entailed,—and the attempted suppression of my books, he admitted, cost him $40,000,—their sale did not seem to be affected in any appreciable degree; and in less than ten years after this Isaac began to realize that the changes which he made such great sacrifices to establish were not improvements, but—to use his own words—"a blot upon the system," and the late years of his life were devoted with tragic earnestness to induce English phonographers to return to the former practise, to which I had adhered and had established as the American standard.

Isaac Pitman's attempt to starve a brother and sister, whom he devotedly loved, for disagreeing with him on certain stenographic theories;—the over-conscientious physician who refused to prescribe for that beautiful soul, Lucretia Mott, because she had become somewhat heterodox in Quaker faith;—Calvin, sending his friend, Cervetus, to the stake for non-acceptance of his own harsh creed;—John Wesley's denunciation of his friend, Thomas Maxfield, for daring to preach without his special permission*;—Kaiser William's belief that he has the Divine right to make other people believe as he does;—are not these examples of pure hallucination? When people, otherwise sensible, are so overwhelmingly convinced of the importance and correctness of their special theory, creed, or course of action, that all argument is as powerless to effect any change as when addressed to the absolutely insane, are not such the victims of hallucination?

*He (Wesley) left Maxfield in charge of the Society in London . . He began to *preach*, and the Lord so blessed his word that many were deeply awakened . . It was an irregularity; it required Wesley's presence to put a stop to it . . He hastened to London . . His mother, perceiving marks of displeasure in his countenance, inquired the cause. He replied, "Thomas Maxfield has turned preacher, I find." Mrs. Wesley looked at him seriously . . "Take care, John, what you do with respect to that young man, for he is as surely called of God to preach as you are" . . Wesley heard Maxfield preach and at once expressed his satisfaction and his sanction.—Life of Wesley, by Southey.

IT was as early as 1843 that my brother made the acquaintance and secured the literary cooperation of Mr., afterwards Dr., A. J. Ellis. Mr. Ellis had given special attention to the analysis of the sounds of language before he ever heard of Phonography, but his studies and labors had reference to the possible completion of a Printing Alphabet for the correct representation of all languages. On learning of the existence of Phonography, Mr. Ellis immediately put himself in communication with the author of the system, and from the first proved himself one of the ablest and safest of my brother's advisors. He was the foremost of those earnest phonographers by whose suggestions and patient experimenting those great improvements were incorporated into the system that distinguished the Ninth from all previous editions, and which, in all essentials, is the American Phonography of today. In 1845, Mr. Ellis completed his adaptation of Phonography to Foreign languages, which Isaac Pitman added to his Manual as an appendix, and his scheme continues to be the standard mode of expressing French, German, and other foreign sounds as used by English and American phonographers today.

Mr. Ellis's chief interest, however, was centered in my brother's phonotypic experiments, which first assumed a practical shape in the January number of the Phonetic Journal for 1844, in which the first practical examples of phonetically printed English were given, where every printed word presented to the eye an unerring picture of the spoken word.

Mr. Ellis was profoundly impressed with the importance of employing a Phonetic alphabet as a desirable, nay, necessary

instrument in national education, in that it furnished the only means by which reading, spelling, and writing could become general among the great body of the English people. Towards the close of 1846, my brother secured the pecuniary cooperation of Mr. Ellis. A partnership was entered into by these two phonetic enthusiasts with little, if anything, beyond a verbal understanding, wherein it was agreed that Mr. Ellis was to give his time, ability, and means to the furtherance of the typic department of the reform, while Isaac Pitman was to give his time and energies to Phonography, leaving the income which the sale of the instruction books was beginning to yield wholly to my brother.

By the joint efforts of Isaac Pitman, Mr. Ellis, and a host of earnest helpers, a thoroughly practical phonotypic alphabet had by this time been decided upon. The embryo printing establishment of my brother was handed over to Mr. Ellis, who took upon himself to relieve my brother from the heavy drafts to which he had before been subject in experimenting with new types. Fonts of different size phonotypes were now ordered—each new letter requiring five new, costly steel punches to be cut, for large cap, small cap, and lower case, Italic cap and lower case Italic; new presses were obtained, a new printing office was opened, and the bills for all were promptly paid by Mr. Ellis, who now took up his residence in Bath, so that he might give his undivided attention to the details of his philanthropic enterprise.

After events showed that nothing could have given such prominence and dignity to Isaac Pitman's fondly cherished hopes as the countenance and aid of a man of Mr. Ellis's literary and social standing. He was a gentleman of good birth, ample fortune, and university training, and the influence he brought to bear reached outside the Phonographic field to which Isaac Pitman's labors had necessarily been confined. While the Phonotypic Reform was confessedly for the uneducated, to help the ignorant to read, and to save children from the time-wasting perplexities of the ordinary spelling, it was evident that this could be done only by first reaching the intelligent classes, the teachers, the patrons of schools, and the publishers of books, magazines, and newspapers. At that time my brother's phonetic propagandism had scarcely touched the

intellectual world. His name was unknown save to the comparatively few who were interested in Phonography. Mr. Ellis's aim was to reach the great world outside. He took charge of the Phonetic Journal, established the Phonetic News, a weekly newspaper, and began the publication of elementary readers and school books, and reprinted in Phonotypy a number of the English classics.

A widespread interest was aroused in favor of the Phonetic movement. Experimental classes for instruction in Phonetic reading were formed and taught in many of the cities and towns of England and Scotland. Classes of ignorant adults, ignorant but reformed drunkards, classes of prisoners in jails, were taught to read by means of tablet-letters and primers in a surprisingly short space of time. Numerous classes of ignorant children in Reformatories and Charity schools, as well as private classes, were taught to read with precision and tolerable fluency in from two to three months, by one hour's daily instruction. An added interest was created in favor of the new system when it was found that the transition from the Phonetic to the Romanic letters was a comparatively easy task. The general resemblance between the old and new styles was so great that the pupil's ability to read the new method enabled it to readily decipher the greater number of words in the common print. It was thus demonstrated that the easiest and speediest way of learning to read Romanic spelling was to *begin* with the Phonetic system.

It was not two years, however, after Mr. Ellis had commenced his disinterested labors that my brother persuaded himself that the phonotypic alphabet ought to be still further improved. He grew impatient with an alphabet that used vowel signs to represent English rather than European analogies. Considering the future universality of the phonetic scheme, he regarded this not merely as a blemish, but an error! With this conviction he proceeded to advocate using the vowel signs *i*, *e*, *a*, with slight modifications in form, to represent their European instead of their usual English values. These and other changes were urged with great persistency; but so ill-timed and radical a change of the 1847 alphabet, which had proved thoroughly practical in teaching, and in accordance with which an imposing number of books had been printed,

was generally considered by the friends of the reform as most undesirable and unwise.

Mr. Ellis was grieved and annoyed by my brother's insistence in this matter. Mr. Ellis, I think, wrote to me more freely than to anyone else in the phonetic field, because he knew I was in sympathy with his views; that I was all the time publicly advocating and teaching the 1847 alphabet, used in his publications, and that for theoretical, as well as practical teaching reasons, I was opposed to my brother's changes. But Mr. Ellis showed his thoroughly generous nature by never hinting to me or to anyone else, as far as I ever learned, what I felt was the true state of the case, namely, that my brother's impatient zeal led him to adopt a course at once unwise, ungenerous, and unjust, in that it minified the great sacrifices Mr. Ellis had made for the Phonetic Reform; it cast a slur upon his labors by the implication that there was a better scheme which he might adopt, but would not, and, more than all, it rendered Mr. Ellis's publication obsolete in the proportion in which Isaac Pitman's proposed changes were accepted.

The following extract from Isaac's letter of 25th September, 1849, relates to the collapse of Mr. Ellis's printing establishment. I was prepared to receive the news, knowing the impaired state of Mr. Ellis's health, and how unexpectedly large a portion of his fortune had been expended in his Phonetic venture; but I well remember that I read this letter from my brother with impatience and distress, for it seemed to show a tinge of exultation at the stoppage of Mr. Ellis's active labors for the spread of Phonotypic printing; an effort which I regarded then, and still do, as intelligently earnest and nobly generous.

"The finale which I said would come off at Albion Place [Mr. Ellis's printing office] in three years, has come already! The whole office received notice to dissolve last Saturday, and the type and workmen will be turned over to Saville, the printer, in Chandos St., London. A more lamentable illustration of 'up like a rocket and down like a stick,' I never saw. . . . I cannot but bless the good angel who whispered to me last January, 'Have a press of thy own.' . . . These were the words of M. as I was lamenting that I could do nothing for

the reform, in consequence of the turn things had taken. We wish to regard the re-establishment of the Journal and the resetting of my printing office as the salvation of the reform. . . . Now, my brave Benn, brave in labors, to work, to work, to work, more than ever, and we shall see all we long to see."

The most conservative objector to the Phonetic movement could not have devised a more effectual way to arrest the progress of the reform than my brother's impatient zeal proved to be,—zeal due to an exaggerated estimate of the importance of his latest theory, where even his moral perceptions were subordinated to a mental hallucination, making him forget his obligation to Mr. Ellis, and the personal interest and rights of his co-laborer. The Phonotypic Reading Reform movement was in a most unsettled condition from '49 to '52. Teaching by means of Phonetic books was greatly hindered by the never ceasing controversies, on really unimportant details. Isaac's proposed changes were not generally accepted, and the alphabet which Mr. Ellis had used was far more generally approved, and what teaching was done in schools was entirely by means of that alphabet. During this period I was in frequent communication with Mr. Ellis, who took as great an interest in the reform as ever. A letter from him, bearing date 10 October, 1852, is interesting as giving an inside view of the phonetic position at the time, from his standpoint.

"Alexander John Ellis to Benn Pitman: I was very much surprised to hear you had ventured to do something for phonetic printing, or 'Reading for All.' I have not been surprised to find you have done but little of late in this respect, for with Isaac's Journal and frequent changes, a great deal of determination is required to bring the subject before an audience. In 1849 you might talk of it as a settled thing, that is settled so far as learners were concerned. Now it is very difficult to say what it is. The 'Changeling' seems its best name, and, very like a miserable changeling it looks in the pages of the Journal. Your brother has done his worst for the Reform. He does not seem able to discover that he cannot possibly get an alphabet in which every one shall agree, that in fact no one of the present day is likely to concoct an alphabet which shall suit those who have been from the first taught to read phonetics. My little boy, four and a half years old, who

knows no other style of reading but the phonetic, is more capable of telling what is to be done than Isaac, or you or I, who have all manner of Romanic nonsense in our noddles. That the Phonetic Council will accept his alphabet as a whole, I do not look for it. The members may do it, but if they do, it will not be because they approve of the alphabet, but because they do not see who is to carry on the reform if Isaac does not, and he declares he will not with any other alphabet. I do hope, however, that the Council will have sense enough not to yield to this piece of compulsion, which reminds me very much of Louis Napoleon's asking for votes that he should decide upon the Constitution, threatening that if people did not vote for him, he would give them up to the giant Grimgiber (see yesterday's Punch) of the Red Republic. Isaac won't give up the reform; he cannot do it; and he will not have resolution, I think, to print in any alphabet that the Council have refused. And though he has shown himself very cavalier towards the Council since the trouble of the election for president [Mr. Ellis was elected President], he must feel that if the Council vote against him, and though he appealed (like Louis Napoleon again) to 'Universal Sufferage,'—

that is to the votes of the whole Phonetic Society,—he has put himself in a very false position. Now I should find it very difficult to name twenty persons in all England (let alone the Council and the Phonetic Society) that are really in any respect qualified to decide upon these matters by vote. People have not the experience or the knowledge. Isaac knows this as well as you or I, but he will, of course, take advantage of the votes which he can collect, and there are very many who will vote as he tells them, just because he tells them. My own impression is that the Council will decide nothing. . . . Your handbill is a very judicious one. The extracts are very good. Of course the extracts relate to the 1847 alphabet only. I suppose you spoke about that alphabet only; for I do not see how you could speak of any other, as Isaac himself has not seemed to know from week to week what he wanted. And what an alphabet he has now got up! It is painful to my sight; a complete clown's jacket, the fool's motley, half Latinistic, half English, half Isaacish—if such a thing must have three halves! *θ* is thrust in for the sake of the Greek; but the Greek *ω* is thrust out of its Greek meaning to please Isaac. *Ii*, *Ee*, must have their "European" sense, but

Oo. Ɯu. Ij. Uɥ.
as in *not up ice new*

are quite English. *Kk* must be used because of its "European" employment, but it is not used by half of the nations of Europe, and *Jj* must be kept in its English sense. What trash! I have no patience at having my intellect insulted by such a composition. Then, Isaac's spelling. But, dear! I wish he would teach a young child to read, and learn what is the meaning of phonetic spelling, for he seems to have lost all recollection of it. As for the opinions of the great majorities, out of those who gave their opinions upon the different subjects, they did not seem worth much, but when they are in the slightest degree opposed to his views, he shows that he does not consider them worth anything; when they corroborate what he says, then they are all in all. With kind wishes to yourself and wife, here and in America, if you really get there—and I think you will have a fine field there—farewell!"

When I had resolved to come to this country, Mr. Ellis

wrote a letter which, contrary to his customary style,—an exceedingly distinct and fully vocalized Phonography,—was written in longhand, evidently with the thought that thus written it might be of service to me. As it refers to some labors of mine in furtherance of the Phonetic Reform, which conclusively showed the practical nature of the 1847 alphabet, and the advantages of phonotypy in facilitating the acquirement of the Romanic print, I give it here, more out of respect for his memory and gratitude for his friendship, than for any care I have for praise of my own work; that is a feeling I can honestly say I have long outgrown.

"7 Apsley Place, Redland, Bristol.
3 Jan., 1852.

"My dear Mr. Benn Pitman:

. . . "I have many times felt it my duty to say in public and in private concerning your exertions, which no one can appreciate more than myself, that, notwithstanding the duties of your arduous profession, you, in the most disinterested manner, devoted much time and great labor to the dissemination of the Phonetic principle of reading, and your efforts were crowned with the most brilliant and deserved success. The experiments which you instituted at the Pauper Schools, at Swinton, near Manchester, upon a class of fifty of their dullest children; upon the criminals at the Preston House of Correction; and the Glasgow Bridewell; your foundation of the Manchester, Preston, and Sheffield Phonetic Schools for adults, have only to be mentioned to show the important part which you played in giving a distinct character and practical value to the Phonetic Principle. But when I consider that you made these experiments at a time when they were most needed, that in fact you were one of the first, if not the first, who ventured upon such bold experiments, and who undertook the labor of requesting and were successful in persuading public authorities to allow a fair and convincing trial of Phonetic reading to be made in cases which would severely test its practical value, and that after having done so you labored cheerfully, assiduously, and without any reward but the feelings of your own conscience, till you triumphantly proved the truth of all the statements and promises you had made, then I feel it no more than your due to declare that you have done more than any one indi-

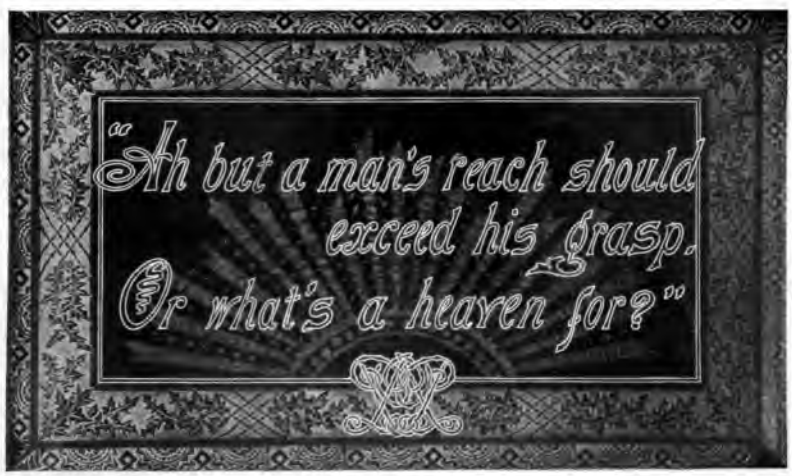
vidual in England in propagating and establishing the phonetic principle of teaching to read. The labors of your brother Isaac and myself in preparing the ground and furnishing the means, by books and alphabets, would have failed of the greater part of their effect but for your timely exertions; and as I am fain to hope that the introduction of the Phonetic principle of reading in the practical form which it has now assumed will prove of great national advantage, I thank you, in the name of those who will experience its benefits, for having been one of the first to furnish the decisive experiments on which we rely for inducing the educationalists of our country to give it their consideration and support.

"With every good wish and every expectation of hearing of your success in the New World, I remain,

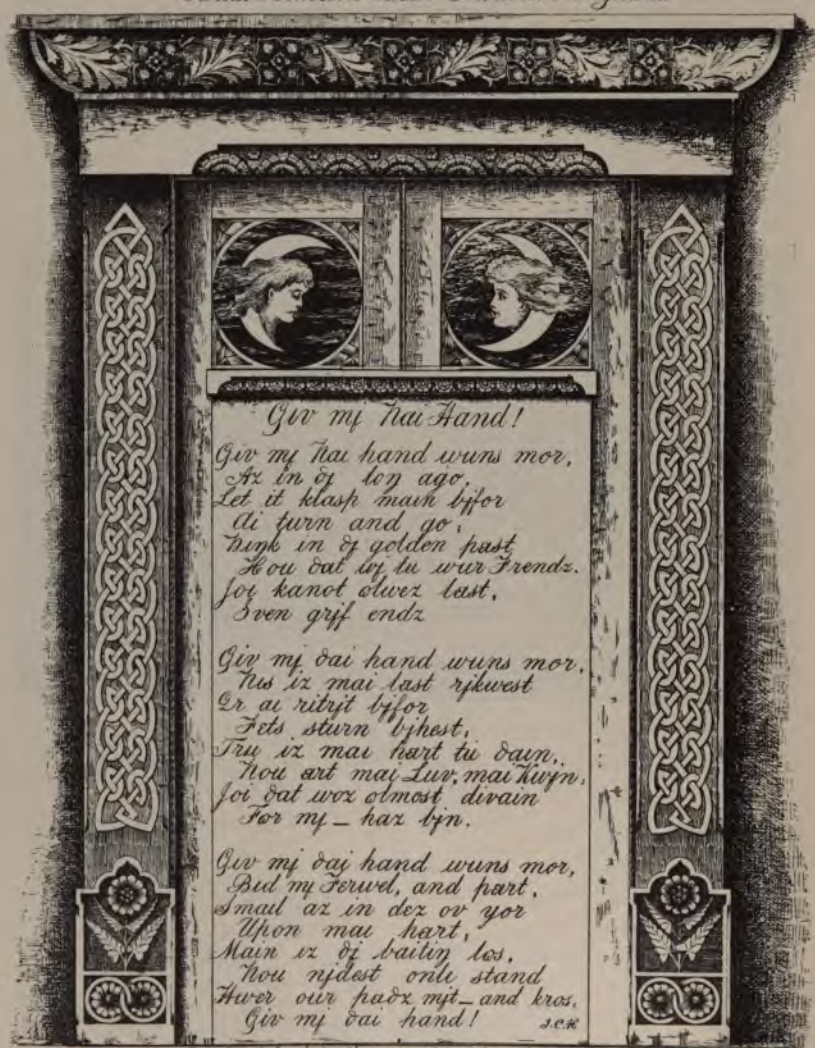
Yours very truly,
Alex. J. Ellis."

Half a century after the time and occurrences here narrated, an unprejudiced judgment, it is believed, may be pronounced with reference to Phonetic history, and, measurably, of its future prospects. From the present standpoint it seems clear—1, that the adoption of the Phonetic principle in the printed representation of the language, from an educational, social, political, and cosmopolitan point of view, is eminently desirable; 2, that it would be a change of habit of so radical a nature that it cannot, by any possibility, be suddenly, or even speedily, brought about; 3, that the adoption of the Phonetic principle of typic representation must be preceded by a general recognition of its utility and importance, as the only means of ridding the language of an imperfect alphabet, and the resulting false and perplexing spelling—(hence the importance of Phonetic propagandism, and instruction by means of even a not-perfect Phonetic alphabet, as tests of its practicability and advantages); 4, that the general practise of Phonography,—in which a full Phonetic Alphabet is used, and the true alphabetic principle applied to *writing*,—will greatly aid in bringing about the ultimate adoption of the Phonetic principle in the *typic* representation of the language; 5, that the change from a false to a true representation of the language will be gradually, but certainly brought about, not only as an educational necessity and a social and political desirability, but as a commercial

necessity, from the fact that correct spelling, with a Phonetic Alphabet, will save one quarter of the present cost of all printed matter; 6, that the precise forms of letters to be used for the representation of sounds is comparatively unimportant, so long as the principle of a "sign for a sound" is recognized, as, whatever forms may at first be adopted, future use will, in all probability, change and improve them; 7, that a Phonetic Alphabet, with some objectionable forms, would be better than the present alphabet and the heterogeneous orthography of to-day—that it would be an educational and national blessing to have an alphabet as ugly as the Russian, rather than continue to use the present one and suffer from its time and temper-wasting perplexities; 8, that a complete Phonetic representation of the language will be preceded by the gradual employment of an amended Spelling, that is, an approach to consistency, by the phonetic use, as far as possible, of the present twenty-six letter alphabet, which will prepare the way for the ultimate acceptance of a complete Phonetic Alphabet of forty letters; 9, that the constant, never-ceasing mania for change and improvement in the forms of the measurably complete alphabet of '47, by Isaac Pitman, did more to check the spread of Phonetic Reform, stop practical teaching, and dampen the ardor of those friendly to orthographic consistence, than all other causes combined; 10, that some consolation may be derived from the fact,—it being, perhaps, a necessary evolutionary process,—that future experimenters will be saved trouble and expense by the avoidance of the forms of the hundred and fifty thousand dollars' worth of "tried and rejected" letters,—costly "literary remains," for catalogue of which see next chapter.


"Ah but a man's reach should
exceed his grasp.
Or what's a heaven for?"

Isaac Pitman's latest Phonetic Longhand



Giv mi Hai Hand!

Giv mi hai hand wuns mor,
Az in dj loŋ ago,
Let it klasp main bifor
Ai turn and go;
Hink in dj golden past
Hou dat dj tu wur Frendz.
Joi kanot olwez last,
Sven grif endz

Giv mi dai hand wuns mor,
Nis iz mai last rikwest
Or ai ritrit bifor
Fets sturn bihest,
Tru iz mai hart tu dain,
Nou art mai Luv, mai liwin,
Joi dat woz olmost divain
For mi — haz bin.

Giv mi dai hand wuns mor,
Bid mi Ferwel, and part,
Smail az in dez ov yor
Upon mai hart,
Main iz dj bailiŋ los,
Nou nidest onli stand
Hwer our padz mit — and kros,
Giv mi dai hand!

J.P.K.

Read ai for i in time; u for i in sir, or ea in earth

THE representation of Language by Alphabetic characters, and its manifold uses in writing and printing, may be regarded as the prime factor in modern civilization. Without it progress would be slow and culture impossible; for the Press, its embodiment, is the special instrument that stimulates, formulates, modifies, and shapes thought, commerce, and conduct. Yet, strange to say, while no single element of civilization is of greater use and importance, none can be shown to be more defective. It is the growth of ages of civilization, and never before was its employment so vital to life and progress as it is today, and its very universality is, probably, the chief impediment to its improvement.

Reading, writing, and spelling are the rudimentary arts that stand at the threshold of educational training, but the difficulty of mastering them is so great that it is generally supposed to be incidental to their nature. The time and effort spent in the acquirement of these elementary arts are felt to be a great tax on the patience of every teacher, and every parent who acts the part of instructor. Foreigners, however intelligent, who aim to acquire a knowledge of English, express their amazement at the contradiction between the words that meet the eye, and their sounds as they appeal to the ear; and, with reason, express their keen regret at the difficulty and waste of time necessary to master the thousand-fold eccentricities of English spelling. Custom, which reconciles us to many glaring anomalies, often blinds even the intelligent to the grave consequences of this defect, and tends to stifle investigation into the nature and extent of the cause. Yet the cause is plain. An Alphabet, theoretically, contains a letter for each sound in the spoken language, and it is easy to believe that were this really the case, reading and spelling would be as

simple, and nearly as easy, as is the reading and writing of numbers, after once learning the shapes and values of the Arabic numerals; and it would be so if the alphabet provided a sign for each sound and uniformly used it to represent one and always the same sound.

The young scholar, on opening his primer, soon discovers the deficiency of the present alphabet, and, alas, its falsity. He readily learns that *s-o* is so and *n-o* is no, but when he is corrected for saying that *t-o* is not toe, but too, he begins to feel a distrust of letters, finding that they are not true to their alphabetical names. As he progresses he is further puzzled on finding that when *o* occurs in other words, it has neither the sound of *owe* nor *oo*, and that in *son*, *on*, *women*, *wolf*, *fork*, *choir*, etc., the letter has a different sound in each word, while in *reasoning* it has no sound at all. Another perplexing difficulty presents itself when he discovers that the alphabet not only fails to provide a letter for the vowel in *to*, *do*, etc., but that when this sound does occur in a word, it is represented in variously arbitrary ways, as, for example: by *oo* in *food*, by *ou* in *soup*, by *u* in *ruling*, by *ue* in *true*, by *u-e* in *rude*, by *ough* in *through*, by *ooe* in *wooed*, by *eu* in *Reuben*, by *ou-e* in *bourse*, by *ew* in *brew*, by *ew-e* in *brewed*, by *o-e* in *move*, by *oeu* in *manoeuvre*, by *oe* in *shoe*, by *ui-e* in *bruise*, by *ui* in *bruised*, by *wo* in *two*, by *out* in *surtout*, by *w-o* in *who*, by *hu* in *rhubarb*, by *heu* in *rheum*, by *ouz* in *rendezvous*, and *ow* in *Cowper* (as the poet pronounced it), and that neither book nor teacher can give him a rule which will enable him to spell or write the next word he meets with that happens to contain this sound. The young student soon discovers that a similar misuse of letters is resorted to when other sounds are to be expressed that have no representative sign in the present alphabet. Instead of using letters to represent unvarying sounds, as, theoretically, they are supposed to do, every letter is used for some other than its alphabetic power! The first letter *a*, for example, has its alphabetic power in *fate*, but it has other and unlike sounds in *fall*, *fat*, *father*, *many*, *want*, etc., and the young student asks in vain for a rule to determine what sound he is to give it in any one of these and like examples.

To the perplexity due to the varying and arbitrary *powers*

of letters, is to be added the varying and equally arbitrary *representation of sounds*. It might reasonably be supposed that when the alphabet *does* provide a letter for the representation of a given sound, that it would be uniformly used for its assigned alphabetic power; but what alphabetic key enables a child, after being taught *n-o*, no; *g-o*, go, to correctly pronounce other words containing this letter, such as *do*, *one*, *sot*, *women*, *wolf*, *cork*, *choir*, or to discover that it is mute in *seasoning?* And when the learner has to spell or write a word containing the sound of *o*, shall he use *o* as in *post*, or *oa* as in *boat*, or *oe* as in *doe*, or *ow* as in *know*, or *wo* as in *sword*, or *owa* as in *towards*, or *ew* as in *shew*, or *eau* as in *beau*, or *au* as in *hauteur*, or *eaux* as in *Bordeaux*, or *ough* as in *though*, or *og* as in *oglio*, or *ol* as in *yolk*, or *ot* as in *depot*, or *owe* as in *owe*, or *oo* as in *brooch*, or *ewe* as in *sewed*, or *aoh* as in *Pharaoh*, or *o-e* as in *bone*, or *oh* as in *oh*, or *oa-e* as in *Soane*, or *ow-e* as in *Knowles*, or *ock* as in *Cockburn?*

As there is no rule governing these perplexing diversities, it may be truly said that the language is not *alphabetically* represented, and that,—as is the case in an ideagraphic representation, like the Chinese,—each word of the language has to be separately committed to memory, both as to its spelling and pronunciation. No wonder that years are spent in the wearisome endeavor to master English orthographic and orthoepic anomalies. Can it be said that they are ever mastered? Is it not a fact that after years of schooling, college, and university training, we are never certain as to the correct pronunciation of a word that is seen for the first time, but which we have never heard pronounced; or the customary spelling of a word that is heard for the first time, but which we have never seen written? Yet a tolerable acquaintance with reading and spelling is necessary for the most elementary education, and it would be disheartening to the young student were he told how formidable the task really is. In Dr. A. J. Ellis' "Plea for Phonetic Spelling," carefully compiled tables are given, showing the extent of the perversity of English orthography, the examples proving that the twenty-six letters of the alphabet are used in six hundred and forty-two different ways, and that the forty sounds of our language, instead of being represented by forty letters, are really represented in not fewer than six hundred and fifteen

different ways! So utterly does our so-called orthography deviate from a true alphabetic standard, that of the two hundred thousand words which may be said to constitute the language, not more than about one hundred simple ones, such as *be, so, no, post, mild,* etc., are pronounced as they are spelled, and all the remainder are spelled in one way and pronounced in another, and therefore have to be separately memorized.

Words alphabetically spelled are, indeed, rare exceptions. If the reader will scan the preceding paragraph, which contains 315 words, he will find that only five,—*we, be, he, so, no,*— are spelled correctly, that is, with the alphabetic powers of the letters, the remainder being spelled in one way and pronounced in another, and for which no rule can be given.

More than a hundred years ago practical Dr. Franklin, among others, gave much thought to the question of alphabetic reform, being greatly impressed with its necessity and importance. The existing system, or want of system, Franklin regarded as one of the greatest obstacles to general education. In the new order of things which he helped to establish, it would doubtless seem eminently desirable that the education of the youth of the young Republic should not be hindered by the literary shackles of a false and antiquated orthography. His suggestions and improvements were sensible and practical, but were far from being a sufficient remedy for the colossal disorder; he is, however, to be honored for his prophetic encouragement; "sooner or later," he said, "something *must* be done." When the waste of time and temper incidental to an insufficient alphabet are considered, and that many more millions of English-speaking children are now concerned than in Franklin's day, it is gratifying to be able to pay a tribute to the intelligent foresight of this pioneer phonetic reformer, by noting that there has been, since his day, a slow but unvarying tendency in American spellings towards a phonetic standard. Since the publication of the first edition of Webster's Dictionary, in 1826, we have become perfectly reconciled to drop the useless *u* in *labor, honor,* etc., and to economize in *check, plow, wagon,* etc., instead of *plough, cheque, waggon*; and many sensible people prefer *catalog, prolog, program,* to the longer forms, and are quite willing to return to the olden spelling,—the favored custom of the poets,—and write *t* instead of the

absurd *ed*, for the final sound in the past tense of words terminating with a whispered consonant, as *stopt*, *ceast*, *sipt*, etc., instead of *stopped*, *ceased*, *sipped;* and using *d* instead of *ed*, when the final sound is a vocal, as *roard*, *aimd*, *bravd*, etc., instead of *roared*, *aimed*, *braved*. In a few newspapers and periodicals of wide circulation, many useless and misleading letters are already dropped, and the words *though*, *through*, *have*, etc., give way to the shorter and more sensible spellings, *tho*, *thru*, *hav*, etc. Ere long *k* and *s* will be used with uniform consistency. Superfluous *c* will be dropped, and *k* will be used in *can*, as in *king*, etc., and *s* will be the initial letter in *civil*, as well as in *sit*. A like uniformity will be insisted on in the use of *g* and *j;* *g* will be always used for the sound in *give*, and *j* as uniformly employed for that in *ginger*. Thus amended and systemized, English spelling, with the present alphabet, will be shorn of many of its absurd and misleading difficulties.

Probably the first move towards an extended alphabet will be when some owner of a linotype awakens to the economy and advantage of using single types for the simple sounds *th*, as in *the*, *them*, etc., and for *sh*, as in *shall*, and for *ti* and *si* in the frequently recurring terminations *tion*, *tial*, etc. If the spelling of words were thus phoneticised, as far as practicable, the slight change in the appearance of the printed page would be tolerated and soon preferred, if only as authorizing a simpler spelling, and for the unquestioned benefit it would be to the young; this attained, the adoption of a complete alphabet and a wholly truthful spelling would be among the assured blessings of the succeeding generation.

Theoretically, the problem of phonetic spelling is simple, and its attainment easy; practically, it is difficult, and mainly because of the tremendous inertia of the existing custom, that is accepted and daily used by more than one hundred and fifty millions of English-speaking people, who, from years of constant use, are more or less familiarized with the incongruities of the customary spelling, and who think they would be inconvenienced by accepting a new, though a better and more truthful scheme. When it is considered that the addition of seventeen satisfactory new script and typic letters would complete the present alphabet,—*c*, *q*, and *x* being rejected, as superfluous,—and that the learning of forty letters would enable a person to read, without hesitation, any printed or written word, and to correctly spell any word that reaches the ear, the problem seems so simple and the result so desirable that it seems amazing the remedy is not immediately and universally demanded.

The first step in the attempt to represent the language satisfactorily, that is, to perfectly visualize speech, so that the printed page shall picture the sounds that reach the ear when the words are spoken or read aloud, is to determine what *are* the elementary sounds of human speech. There is little difficulty here, after the past sixty years' discussion of the subject, provided the general and popular speech of the people be accepted as the standard, without regard to certain niceties and shades of pronunciation that distinguish the speech of a few. The Phonetic Movement which has resulted in the settlement of many questions once in dispute, is told in the fifty years' issue of Isaac Pitman's Phonetic Journal. Before

coming to a decision, point by point, upon the manifold differences of pronunciation and the most fitting representation, deciding first what were the sounds that people used in speech, or thought they used, such lengthy discussions occurred that for years orthoepic agreement and a satisfactory representation seemed among the most perplexing of human problems. As a matter of fact, the "absolute truth" of representation, in quest of which Isaac Pitman set out, came to be somewhat of a compromise. Only gradually did it become evident that as human organisms are indefinitely varied, making the vocalization of individuals to vary, consequently no two human beings pronounce a given word in exactly the same way, because the form, position, force, and point of contact of the vocal organs necessary for the production of a given sound, not being the same in any two human beings, the resulting sound will not, with any two persons, be absolutely the same. That which it was found wise to agree upon was an alphabet and an orthoepy that would be accepted and used by the majority of educated people, and not attempt to provide for shades of pronunciation that were recognized only by the super-critical.

Much discussion has taken place as to whether the alphabet should represent elementary sounds only, or whether the diphthongal glides, *i* in *time*, *oi* in *boy*, and *ow* in *cow*, should or should not be represented by a single letter. If the question were left to teachers, it would doubtless be decided affirmatively, especially with respect to the diphthong *I*, *eye*, *(h)igh*, in view of the fact that this vowel, more than any other, is differently pronounced by the English, Australian, and American branches of the English-speaking world.

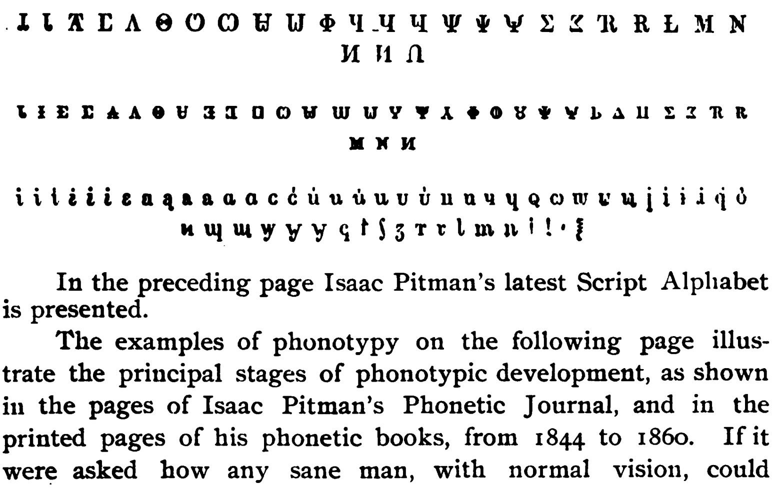
On carefully examining a well printed page, the eye is arrested by the uniformity and beauty of the Romanic *forms*. They are the culmination of innumerable experiments by scribes and artists, extending over thousands of years, embracing the skill and taste of both the Eastern and Western worlds, and they have been completed, say perfected, by the exacting demands of modern type-makers and type-users. The legibility, distinctness, and symmetry of the Romanic letters are never so fully appreciated as when an attempt is made to invent new forms of equal beauty, and the seeming impossibility of doing this presents the first difficulty in the path of the


Phonetic Script Alphabet.
Long Vowels
Ii as in eel
Ee „ ale
Aa „ alms
Oo „ all
Oo „ old
Yu „ ooze
Short Vowels
Ii as in it
Ee „ ell
Aa „ at
Oo „ on
Uu „ up
Yŭ „ put
Diphthongs.
ei, as in ice. oi, as in oil, ou, as in out
Consonants.
Pp as in palm
Bb „ balm
Tt „ tame
Dd „ dame
Cc „ church
Jj „ judge
Kk „ cape
Gg „ gape
Ff as in fine
Vv „ vine
Th „ thigh
Dh „ thy
Ss „ seal
Zz „ zeal
Sh „ shall
Zh „ azure
Ll, as in low, Rr, as in row
Mm, in may, Nn, in nay Ng, in sing
Coalescents.
Ww, in way, Yy, in ye
Aspirate.
Hh, in hay

alphabetic reformer. New letters, however, *must* be added if we would complete an alphabet for the English language. But to find satisfactory forms for the seventeen sounds that at present have no representative letters, is no easy task, and the phonetic reformer of the future will be wise who avoids spending a moment in devising new forms before he has carefully examined the following formidable list of letters that were suggested, cut, cast into types, and tried for longer or shorter periods in the printed page, by Isaac Pitman and Dr. Ellis, and, after a fair trial, rejected as unsatisfactory, either for lack of distinctness, symmetry, or beauty, "spotting" the page, or for incongruity, as, for example, using the superfluous consonant *x* to represent some vowel.

This list of rejected letters, and experiments with them in printed matter, represents an outlay of more than one hundred and fifty thousand dollars. Coincident with experiments in new Roman forms, there were, of course, attempts to devise suitable corresponding Italic and script forms for both capital and small letters.

REJECTED PHONOTYPIC FORMS.



In the preceding page Isaac Pitman's latest Script Alphabet is presented.

The examples of phonotypy on the following page illustrate the principal stages of phonotypic development, as shown in the pages of Isaac Pitman's Phonetic Journal, and in the printed pages of his phonetic books, from 1844 to 1860. If it were asked how any sane man, with normal vision, could expect that such a presentation of English as the 1844 example would be accepted by the English speaking race as a substitute for the present typic representation of the language, it would be difficult to frame a satisfactory reply. In extenuation

of its crudeness,—a relative crudity, be it remembered, due to the more critical vision which subsequent experiments have given us,—it might be said that it was better than anything which had been done before, that it was the result of a great expenditure of thought, time, and means, and, strange to say, vastly to be preferred to many attempts at phonetic reform that have since been made by others to attain the great desideratum,—a perfected representation of English, which alone would make possible its acceptance as a Universal tongue.

The example of the 1847 phonotypy is the alphabet which was adopted by Mr. Ellis, and used in all his printed books, in the Phonetic Journal while under his control, and in the pages of the Phonetic News, his weekly newspaper. It is the alphabet by which the most satisfactory results were obtained in teaching children, ignorant adults, mission pupils, and foreigners to easily learn to read English, as thus truthfully represented.

The 1852 alphabet is the one which Isaac Pitman insisted was to be preferred to the '47, and all preceding alphabets, in that it recognized the European values of the vowel types, while the '47 alphabet recognized only the English usage,—a conviction in which my brother lived and died, but which, in the opinions of the majority of English phoneticians, was the gravest and most unfortunate error of his life.

No. 1, *January*, 1844.

Ɪ Ɛ A Ɵ Ꞷ Ʊ (heard) Ʊ, I E A O U Ɯ,
Ɪ Ø Ʊ Ɯ, W Y H, P B T D Ɛ Ɉ C G, F V
Ɵ Ʌ S Z Ʃ Ʒ, L R, M N Ŋ

Specimen:

NUƟIŊ HWOTEVER IZ MOR TU BI DEZIRD, OR MOR DELITFUL, ƋAN ƋE LIT OV TRUƟ: FOR IT IZ ƋE SORS OV WIZDUM HWEN ƋE MIND IZ HARAST WIƋ OBSKURITI, DISTRAKTED BI DʊTS, RENDERD TORPID OR SADEND BI IGNORANS OR FOLSITIZ, AND TRUƟ EMERJEZ AZ FROM A DARK ABIS, IT ʃINZ FORƟ INSTANTENIUSLI, LIK ƋE SUN DISPURSIŊ MISTS AND VEPURZ, OR LIK ƋE DON DISPELIŊ ƋE ʃEDZ OV DARKNES.

No. 3, *June*, 1846.

i ε a e ɑ ɯ, i e a o u u, ị ɵ ʊ ụ,
w y h, p b t d ç j c g, f v t ɗ s z
ʃ ʒ, l r, m n ŋ.

Specimen.

Nutiŋ hwotever iz mor tu bi dezịrd, or mor delịtful, ɗau ɗe lịt ov truŧ: for it iz ɗe sors ov wizdum. Hwen ɗe mịnd iz harast wiɗ obscụriti, distracted bị dʊts, renderd torpid or sadend bị ignorans or fəlsitiz, and truŧ emerjez az from a darc abís, it ʃịnz forŧ instantɑniusli, lịc ɗe sun dispersiŋ mists and vapurz, or lịc ɗe don dispeliŋ ɗe ʃadz ov darcnes.

No, 5, *Proposed Jan.*, 1852.

ι ε ą ɑ ɵ ụ, i e a o u ɯ, ị ʊ ɯ, w
y h, p b t d ç j c g, f v θ ɗ s z ʃ ʒ,
l r, m n ŋ.

Specimen.

Nuθiŋ hwotever iz mɵr tu bι dezịrd, or mɵr delịtful, ɗan ɗe lịt ov trụθ: for it iz ɗe sɵrs ov wizdum. Hwen ɗe mịnd iz harast wiɗ obscụriti, distracted bị dʊts, renderd torpid or sadend bị ignorans or fɑlsitiz, and trụθ emerjez az from a darc abís, it ʃịnz fɵrθ instantεniusli, lịc ɗe sun dispersiŋ mists and vεpurz, or lịc ɗe dɑn dispeliŋ ɗe ʃεdz ov darcnes.

No. 2, *October*, 1844.

i ε ą ò c (heard) ɑ ɯ, i e a o u u,
ị ɥ ʉ ɯ, w y h, p b t d ç j k g,
f v ŧ ɗ s z ʃ ʒ, l r, m n ŋ.

Specimen.

Nutiŋ hwotever iz mor tu bi dezịrd, or mor delịtful, ɗan ɗe lịt ov trɯŧ: for it iz ɗe sors ov wizdum. Hwen ɗe mịnd iz harast wiɗ obscuriti, distracted bị duts; renderd torpid or sadend bị ignorans or fòlsitiz, and trɯŧ emerjez az from a dark abís, it ʃịnz forŧ instantεniusli, lịk ɗe sun dispersiŋ mists and vεpurs, or lịk ɗe dòn dispeliŋ ɗe ʃεdz ov darknes.

No. 4, *Jan.*, 1847.

ε a ą e ɑ ɯ, i e a o u ɯ, ị ɵ ʊ ụ,
w y h, p b t d ç j c g, f v ŧ ɗ s z
ʃ ʒ, l r, m n ŋ.

Specimen.

Nutiŋ hwotever iz mɑr tu bε dezịrd, or mor delịtful, ɗan ɗe lịt ov truŧ: for it iz ɗe sɑrs ov wizdum. Hwen ɗe mịnd iz harast wiɗ obscụriti, distracted bị dʊts, renderd torpid or sad'nd bị ignorans or fəlsitiz, and truŧ emerjez az from a darc abís, it ʃịnz forŧ instantaniusli, lịc ɗe sun dispersiŋ mists and vapurz, or lịc ɗe don dispeliŋ ɗe ʃadz ov darcnes.

No 6, *Romanic Alphabet.*

aa, b*b*, cc, d*d*, e*e*, f*f*, g*g*, h*h* i*i*, j*j*, kc, l*l*, m*m*, n*n*, o*o*, p*p*, qc, r*r*, s*s*, t*t*, u*u*, v*v*, w*w*, x*cs*, y*y*, z*z*.

Specimen.

Nothing whatever is more to be desired, or more delightful, than the light of truth: for it is the source of wisdom. When the mind is harassed with obscurity, distracted by doubts, rendered torpid or saddened by ignorance or falsities, and truth emerges as from a dark abyss, it shines forth instantaneously, like the sun dispersing mists and vapours, or like the dawn dispelling the shades of darkness.

NOT the least of the difficulties attending the construction and introduction of a philosophic alphabet, by which the phonetic representation of the language is made possible, was that of determining what were the actual sounds of many words and classes of words, and what letters should be put on paper for the eye to translate and the voice to follow. While all intelligent people are interested in the assurance that they speak correct English, few are aware of the wide limits within which "correctness" may be assumed, being unaware of the many nice but marked distinctions which characterize the pronunciation of educated people of different localities. And this applies to all branches of English-speaking people. Equally true is it that there is no absolute standard of pronunciation. Speech, like culture and civilization, of which it is the outgrowth, is all the time in a state of transition and development. Grammatical and orthoepic changes seem to follow the law of progress in the line of least resistance. The easiest and pleasantest utterance is that towards which *use* doth tend.

Modern dictionaries,—marvels of elaboration, erudition, scientific and conventional completeness,—as the Century, the Standard, and the International Webster, not to overlook the stupendous, though incomplete, New English Dictionary, edited by Dr. Murray and Mr. H. Bradley,—works that present themselves as authorities, not only vary in regard to the pronunciation of many words and classes of words, but they leave certain questions of pronunciation unsolved, admitting, by inference, that in the present state of knowledge and practise they are unsolvable. Phoneticians have abundant reason for thinking that after fifty years of investigation and discussion, pioneered by Sir Isaac Pitman, they have settled a great many perplexing

questions of use, practise, and application; nevertheless, there are opinions still held by intelligent persons, which, from their standpoints, may be regarded as yet unsettled.

For example, do we use *ch* or *sh* as the terminal sound in the words *French*, *bunch*, *pinch*, *filch*, etc.? It is amusing to find so great a stickler for the right thing, as Isaac Pitman,—and "right" with him had a moral side to it, and meant more than "correct",—giving *sh* in his Phonographic Dictionary for 1846, *ch* in the edition of 1850, *sh* in the edition of 1852, *sh* in the edition of 1867, and *ch* in the 1878 and subsequent editions, as the correct pronunciation of this class of words. But, with seeming inconsistency, *sh* continued to be used in a few words, as *filch*, *Welch*, in editions of his dictionary, as late as 1883, 1891, and 1893. H. U. Jansen (Exeter, England), one of our early patrons and phonetic enthusiasts, whose opinion Isaac Pitman ranked with that of Dr. Ellis, Dr. William Gregory, Sir Walter Trevelyan, and a few others of his early advisers, insisted that it was "simply absurd" to write this class of words with other than *sh* as the terminal sound. Dr. Gregory (Edinburg) characterized the use of *ch* in these words as "the greatest absurdity possible." A still further difference of opinion exists as to what is the exact nature of the sound usually represented by *ch*. Admitting *French*, *trench*, *each*, to be preferable to *Frensh*, *trensh*, *bransh*, is the final sound in the former words, and initial in *cheer*, *chain*, *chalk*, etc., a simple sound, or a consonantal glide, consisting of *t-sh*, as claimed by each of the dictionary authorities above named, and by lexicographers and phoneticians generally? Dr. Thomas Hill, in discussing this question with me, said, "It is unintelligible to me how a person, with a normal vocal organization, can insist that *ch* begins with *t*, or regard this sound to be other than a simple one;" that is, a whispered sound exploded from *one* point of contact, in contradistinction to a glide from the *t* to the *sh* position. If one pronounces *mit-shell*, and then *Mitchell*, he may readily convince himself (1) that the latter word is unlike the former, and (2) that the former word involves a glide from the *t* to the *sh* position of the vocal organs, which is avoided in pronouncing the latter word. If these inferences are admitted, it follows that *ch* is a simple articulation, and not a compound; i. e., a glide from the *t* to the *sh* position. Of course, if *ch* is a glide con-

sisting of *t-sh*, its corresponding vocal consonant *j*, consists of *d-zh*.

There are local distinctions in English speech, and equally great and more subtile differences, which may be called class distinctions. If it could have been foreseen, half a century ago, that the introduction of steam and electric travel would make intercommunication so free, easy, and universal as it is to-day, an intelligent person would not have hesitated to predict that one effect would be to make the pronunciation of English homogenous, wherever the language ~~was~~ spoken. How far this anticipation is from being realized, and how wide are the diversities yet heard, even among the educated, every ear-trained traveler is aware. In the very interesting life of John Ruskin, by his friend, W. H. Spielmann, Ruskin's speech and readings are spoken of as "*r-less*." When it is remembered that Ruskin, though London born and bred, was a public lecturer, and that the latter years of his life were spent in the Northern part of England, where *r-less* pronunciation is laughed at as "cockney" speech, it is surprising he did not outgrow his early and his university habit, and that his ear did not demand a more finished pronunciation, one more in accord with his inimitable *written* English. When educated Americans hear an English curate, of Oxford or Cambridge training, say, "Feah the Laud; Onah the King. 'e thut 'ath yahs to yah, let 'im yah!" they are amused and surprised to find. that a people who can claim a native right to pure, clean-cut, robust, pregnant English, should accept without protest what, to the average American ear, is an attenuated and ridiculous patois.

It was long a disputed question with phoneticians, and is yet practically unsettled, whether the long *i* in *eye*, *time*, *by*, etc., should be represented by a single type, or by the two letters whose sounds are supposed to make the diphthongal glide. But what are the two sounds that make *eye?* Isaac Pitman has for years used *ei*. The average American would prefer *ai*, often recognizing a still broader *a* in *Cairo*, *Kaiser*. In Knowles' English Dictionary (early editions) long *i* seems to be recognized as consisting of *oi*, for *ice* and *noise* are given as containing identical sounds. But Mr. James Knowles, whom I had the pleasure of meeting in Belfast, in 1868, was an educated Irishman, and his pronunciations, in many classes of words, especially

in unaccented syllables, indicated the usage of careful speakers more closely than did the phonetic spellings of Isaac Pitman during the first ten years of his phonetic labors, and whose pronunciations, during this time, in unaccented syllables, especially, would have been considered by Knowles as provincial and slovenly. We cannot, however, accept Knowles in all cases as an authority, for throughout his dictionary he gives *ripd*, *kickd*, *chancd*, etc., as the pronunciation of the past tense of *rip*, *kick*, *chance*, instead of *ript*, *kickt*, *chanct*. He fails to recognize that *d* is an unpronouncable sound in such cases, and that *t* invariably follows a whispered, and *d* as regularly follows a vocal, consonant in this class of verbs; thus, *ribd*, *bagd*, etc., indicate the correct pronunciation of *ribbed*, *bagged*, etc.

It is a growing usage to make no distinction between the diphthong *u*, in *new*, *tune*, *pure*, *beauty*, etc., and that in *youth*, *union*, *ewes*, etc. In the former words, especially in New England, the prevailing custom has been to make the diphthong consist of *e-oo*, and in the latter words *y-oo*. To make the diphthong *u*, uniformly, *y-oo* is certainly easier and more euphonious.

The pronunciation of a class of words, as *flute*, *blue*, *clue*, etc., where *u* follows *l*, seems to be in a transition state. Careful speakers, English and American, have heretofore used the diphthong, but the tendency is to the easier pronunciation *floot*, *bloo*, *cloo*, etc. *U* following *r*, as in *rude*, *rule*, etc., is uniformly *oo*, though many authorities heretofore favored the long *u*.

It is not wise to decide in favor of an established habit of pronunciation, apart from consideration of what it is desirable to *teach the child*. Perhaps the majority of educated people say *soljur chrischun*, *queschun*, *cenchury*, *naychur*, etc., for *soldier*, *christian*, *question*, *century*, *nature*, etc., as, fifty or more years ago, they said *ejucation* for *education*, *chune* for *tune*, *juke* for *duke*, *hijyous* for *hideous*, etc., as Walker gives. For many years phonetic reformers adopted the conventional pronunciation of the former words, but when it came to teaching the young, it was found that precision and etymology were factors not to be overlooked, and that to begin by teaching colloquial pronunciation, led to slovenly and vicious habits of speech. It is surprising that Isaac Pitman and Dr. Ellis ever used *uh* (the murmured vowel, or vocal murmur) in the first syllables of *abide*, *again*, *majority*, etc., although usually so pronounced, — instead

of *a* as in *ask*. For many years after he attempted to write and print phonetically he used *chrischun* for christian, *nachur* for nature, *soljer* for soldier, etc.; and not till after ten years of experimenting did he consent to the spellings of *yoomor* instead of *yoomur* (humor), *canon* instead of *canun*, *questyon* instead of *questyun* (question). In adopting a more precise spelling he says (Phonetic Journal, April, 1852): "Only a few months ago we ourselves had so strong a dislike to these spellings, when presented in phonetic orthography, that we could not seriously entertain the idea of printing them."

Shall *ex* as in *exist*, *examine*, *exert*, etc., when the accent is on the following syllable, be *ekz*, or *egz*? Shall we say *ekzist*, *ekzamine*, etc., or *egzist*, *egzamine*, etc.? Isaac Pitman favored and used the former pronunciation. This country generally follows the latter.

It illustrates the evasive nature of the sounds of speech to note the varying opinions held by phoneticians as to the nature and use of the coalescents *w* and *y;* sounds which have seemingly, been misunderstood from their inconsistent use in the ordinary spelling, where they are made to do duty, now as vowels, at other times as consonants. Lexicographers and grammarians say *w* and *y* are sometimes vowels and sometimes consonants. The fact is, they are neither. They rank midway between vowels and consonants; *w* being a slightly obstructed *oo*, and *y* a slightly obstructed ē. We have but to pronounce oo-ay, first distinctly, then more rapidly without a pause, thus causing a closer position for the *oo*, and we hear *way*. If we pronounce ē-oo without a pause, we hear *yoo;* that is ē-oo, uttered without a hiatus or obstructing pause, becomes *you*, *yew*. The coalescents *w* and *y* are not vowels, but are like consonants in that they are used *only* when preceding vowels; and they are not vowels in that they cannot be sung,—that is indefinitely prolonged,—and to be pronounced, must be exploded like consonants. They are unlike both vowels and consonants in that they never terminate an English syllable or word; and they are like vowels, in that they can be preceded by the aspirate *h*, as in *whey*, *wheel*, as different from *way*, *weal*, and as *hew* or *Hugh* differs from *you*.

Words like *compose*, *seize*, *glaze*, *enclose*, etc., usually change the final *z* to *zh* in their derivatives *composure*, *seizure*,

glazier, enclosure, so that we hear *compozhure, seizhure, glazhier, enclozhure.* When, as in this class of words, two pronunciations are sanctioned by our leading dictionaries,—some giving *compozure, seizure, glazier, enclozure*,—the spelling and pronunciation which preserves the primitive word unaltered is to be preferred, and will, most likely, be the one ultimately adopted. In like manner the words *sex, fix, sense*, etc.,—the final sound being *s* (the whispered *z*),—their derivatives *sexual, fixture, sensual*, are usually pronounced *sekshual, fikschure, senshual* To correspond with the rule mentioned, they should be *seksual, fixture, sensual.* The Century dictionary prefers the latter pronunciation.

A scheme of writing, to be practical, cannot recognize vowels of more than two lengths, that is, long and short. Careful speakers, however, in certain classes of words use a vowel of medium length. They insist that *a* preceding the continuants *f, th, s*, and *sh*, as in *laugh, path, master, rash*, etc., is longer than the *a* in *pat, cat, man*, etc., but not so long as the *a* in *alms, psalm, father*, etc.; and also that the *o* in *lost, soft, tossed, long*, etc., is longer than the vowel in *lot, sot, top*, but shorter than the vowel in *fall, fault, law*, etc., though of the same quality. The vowel in *past, path, master*, etc., we contend is not the lenthened *a* in *pat, sat*, etc., but the shortened *a* in *palm, father*, etc. English phonographers write the short vowel for the medium length one in both cases, while Americans, more consistently, write the long one. Phonography provides a convenient means of indicating the precise length of these vowels, if required, by a relative shading or thickening of the vowel sign.

The impolicy of cumbering the alphabet with letters to represent medium length vowels, would seem the only justification for Isaac Pitman's spelling of words containing long *e*, when not accented. The English use of the same vowel in *besides* as in *bet, revile* as in *revel, prefer* as in *preference*, etc., is unknown here. American authorities, without exception, give this class of words with long ē, and never with the *e* in *met*, but note that in the pronunciation of the former words, where the accent is on the following syllable, the *e* is somewhat briefer than when under the accent.

Many elocutionists insist on recognizing the vanishing

sound in the vowels ā and ō. *A* in *day*, *nay*, *rail*, and *o* in *foe*, *moan*, *roll*, they do not regard as strictly simple vowels. A simple vowel is a vocalization where the organs of speech remain unchanged during its utterance, whereas in the deliberate utterance of words containing long ā (when not followed by *r*), the sound vanishes into *i* or ē, while ō vanishes into *oo*. This usage may be allowed in very deliberate utterance, but a nice ear and caution are needed to avoid making it a vocal blemish. Prof. Bell, in his *Principles of Speech and Elocution*, says: "The omission of this final element of these vowels is a marked provincialism"(!)

The vowel *a* preceding *r*, as in *pair*, *dare*, *prayer*, etc., is generally admitted by careful speakers of English, except the Scotch, to differ from *a* in *plate*, *dame*, *paint*, etc. The *a* in the former words is a somewhat more open sound than when it precedes other consonants, and a further difference consists in its vanish into *uh*, the vocal murmur; but when preceding other consonants the vowel position of *a*, in seeking repose, vanishes into *i* or ē.

R is a further disturber, in that it causes a diversity of pronunciation and representation, in certain classes of words, between American and English phonographers, which may long remain unreconciled. The Phonetic scheme of vowels provides but two signs to represent three unlike sounds, as heard in the following words. Lines 2 and 4 are supposed to contain the same vowel, though differently spelled.

1. set, pen, serried, perish, peril, etc.
2. earth, serve, mercy, firm, first, whirl, etc.
3. cut, rub, sun, hurry, scurry, etc.
4. word, burst, curse, worth, curl, whorl, etc.

English phonographers write lines 1 and 2 with short *e*, and lines 3 and 4 with short *u*. American phonographers write the first line only with the short *e*, and lines 2, 3, and 4 with the short *u*. The English practise of writing *serve*, *earth*, etc., with the same vowel as *set*, *pen*, etc., and making a difference between *firm*, *first*, etc., and *furnish*, *further*, etc., seems paying deference to the spelling which is not justified by the usual pronunciation of educated people.

Whether or not we pronounce the *k* that is indicated in the spellings of the words *links*, *banks*, *sphinx*, *unctious*, *anxious*,

sanction, etc., may be regarded as another unsettled question. When *ng* is immediately followed by *s* or *sh*, the articulating organs, in gliding from the *ng* to the *s* or *sh* position, pass over the *k* position, but as the *k* is not articulated,—i. e. exploded,—it may be claimed that it forms no part of the spoken word, and therefore should be omitted when written; and that *things* differs from *thinks* only in that the former word terminates with *z* and the latter with *s*. In like manner *thanked* is not *thangkt*, but *thangt; plumped* is not *plumpt*, but *plumt*.

The use of *an* instead of *a*, when preceding a word beginning with a vowel or silent *h*, was probably a matter of convenience in pronunciation before it became a rule of grammar. In an intelligently conducted newspaper now before us, a leading article begins with, "An unique discussion," etc. The writer would never think of saying, still less of writing, " an youthful discussion;" but the phonetic absurdity of spelling *unique* with a vowel, and *youth* with a consonant, cheats the eye into the belief that *unique* needs a preceding *an*. The reason for changing *a* into *an*, when used before a vowel, is to avoid the embarrassing hiatus of uttering two succeeding vowels. To say *a other* is not so easy as *an other* (another), and the latter practise is to avoid the hiatus of allowing the open mouth vocalization of *a* to glide into the easiest of the (closed) vocal consonants, which is that of the *n* position; when the vocal organs are again ready to open for the utterance of any word commencing with a vowel. Connected with this is the yet unsettled question whether hotel', histor'ical, etc.,—where the accent is not on the first syllable,—should be preceded by *a* or *an*. The aspirate *h*, though heretofore considered a consonant, is not to be so regarded. It is not a contact; it is merely an open mouth, audible breathing, through the position of the vowel or coalescent it precedes. While therefore it is correct to say, a history—the accent being on the first syllable—yet when the accent falls on the second syllable, making the aspirate less emphatic, many of our best writers prefer the easier and more euphonious phrase, "*an histor'ical account*," "*an hered'itary failing*," etc.

THERE is a seeming absurdity in devoting a chapter to the poverty of a man who never knew hunger or want, or ever lacked shelter or decent attire. It is possible for a man to be rich in spite of his poverty, as their are many who are poor in spite of their wealth. The narrative of Isaac Pitman's life would be very incomplete that failed to tell of the years of keen anxiety that came from the burden of debt, the thought of the looming type, paper or printing bill, for which he was unprepared, and, still worse, the frequent inability to pay the weekly wage that had been earned by his faithful helpers. These accompaniments of Isaac's life of untiring industry cannot be more fittingly expressed than by the dreadful word that heads this chapter, for the poverty that brings meal time, and nothing to eat, would have been thankfully accepted by my poor brother in exchange for the pecuniary straits to which he was often reduced. But it would be misleading to say this, and not to add, that Isaac's life, due to his disciplined nature and his hopefully placid organization,—still more, to the fact that his time and energies were wholly given to work of his own choosing,—was one of more abiding satisfaction than probably falls to the lot of one in a thousand.

Thoroughly as we believe in Lady Mary Wortley Montague's dictum that physical pain is the greatest of all human ills, and hardest to be borne, compared with which heart-aches and mental disquietudes are the lesser and lighter evils, yet the fact is dolefully significant that many find their mental troubles so

unbearable that the poor unfortunates, rather than endure them, seek the consolation of drowning, hanging, or poison. My brother's temperament was such that he endured his woes in marvelous faith and hopefulness, which I, who in some degree was made partner in his troubles, did not always share. To me his urgent needs, so often referred to in his letters, were grievous troubles, and were an ever-present stimulus to do everything that hard work could achieve to lighten his constantly-recurring monetary burdens.

It did not lessen my brother's disquietude that his troubles were of his own making. He could have avoided them had he been less faithful to his ideal. He lived in the thought that he had certain work to do, and do it he must and would. That typic experiments were very costly, and steel punches obtainable only for hard cash, were mere incidents in his special work, of which it would be useless and unwise to complain. The work had to be done, and no one can look into that placid, determined face, which shows Isaac Pitman at forty-seven, and doubt that in spite of difficulties, small and great, he was the one able to overcome them—a determination very significantly expressed in his own words, "I would go on doing all in my power to spread Phonotypy and Phonography were I sure that I should be hanged for it in the end." This sentence concludes one of his letters, and though finishing with a note of laughter, was as deep-seated a conviction as any he ever expressed.

It would be unjust to give the following extracts from my brother's letters, without the reminder that his correspondence with me was, perhaps, more confidential than with any one else. Then again, the reader should bear in mind that phonographic letters are written with a freer hand and mind than ordinary longhand epistles. Phonography is often called "talking on paper." Longhand, which may be likened to slow talk, tends to make the writer formal, cautious and deliberate, while Phonography, by giving to the hand the tongue's freedom of expression, is more likely to be an impress of the writer's unrestrained feelings. During the ten years I spent in England lecturing on and teaching Phonography, I was accustomed to look for a daily letter from Isaac, and though, on rare occasions, two or more days might pass without one, when the diminutive scrap arrived, it would probably be found to contain items of phonographic

business and news, dated on two, three or more consecutive days. Isaac's letters were very unlike ordinary longhand epistles, both in looks and expression. They were always written on small three by four sheets of ruled paper, which did not need folding to be inclosed in an envelope. They were sometimes written on a single leaf, but oftener they filled a folded sheet, and small as they were, they were full of life and thought, without any waste of space or words, and expressed in interesting, confidential chat, mirroring his most active thoughts, and always picturing the impulse of the moment,—features which the slowness of ordinary longhand, had it been employed, would have been likely to stiffen and modify.

The following extracts, which might easily be increased ten-fold, date from 1846 to 1852.

"Tomorrow evening I shall be in great distress if I don't get £5 remittance from you. I had to raise a temporary loan of £20 of Mr. Bush, for three weeks, last Monday, on account of a small paper bill which fell due."

"Your remittance, received yesterday, was so serviceable, for without it I should have sent home two workmen unpaid. Not only was I short to this extent for paying the office, but I had to borrow £15 of Holway, for four days, till I could get it from Fred, to take up the £28 bill of his just due."

Frederick Pitman, the youngest of the family, was the London publisher. London is the distributing center of literature for all England. The books and magazines printed at Bath were all sent to and distributed from the London agency.

"Within half an hour after I returned from the postoffice came your hearty, cheering letter with £20. I felt that I could have jumped over the moon as I took it in my hands. I have a heavy paper bill due on the 29th of this month, towards which I shall want a great deal of help from you. There is also £30 the 4th of next month, for Holway's lithography; but I know you will do your best for me, only I want you to know my straits."

"I was going to forget the most important matter of all, namely, that I want some cash from you as quickly as you can get it."

"My heavy debt of £111, to be provided for by the 23d, hangs upon me like a millstone. I may, if Fred should be very

gracious, get from him £30 or £40 towards it, for I have offered him a handsome bonus in addition to interest, and I may collect during the next week, through my offer of books at half price, £30 more, but I fear I shall not. Do spare me something, my brother Benn, and I will raise it for you,—for I am not the very worst hand in the world for raising the wind [laughter],—before you leave for America."

"If you have not already dispatched the £5, please send it by return post, for I have only half a crown in my pocket, and I cannot send to the bank because I have already overdrawn as much as I would like to venture upon."

"I dismissed Evans, the engraver, on Saturday, because I had no means of raising the money to pay his wages. The week before last I had to leave about £3 office wages unpaid, and in order to pay Evans I had to borrow £5 to make the sum up."

"I have no other means whatever of paying my men this week, but by your sending me something by the next post. I have overdrawn Fred in order to meet the paper bill of Tuesday, and can get nothing from him."

"I have this moment finished reading the proofs of the Bible [in phonetic print], and must tell you how thankful I feel that I have been enabled to bring it to a close. I had many fears. I shall now reduce my weekly expenses by two hands. I have, however, two very heavy bills falling due, one at the commencement of next month, £139, and the other at the beginning of April, £130. If I weather this storm, I shall be safe and easy in all my operations."

"I have not £1 to pay my office tomorrow, and don't know where to get it. I have drained Fred, it seems, to the last extremity. I owe him about £200, which I have overdrawn, and I pay him interest for it. Blessings on this new Manual, which will set me straight next year. If I hadn't raised the price of the Manual to 1s 6d, at your suggestion, five years ago, I would do it now."

This reference to the increased price of the Manual recalls the fact that a few years after the first cheap edition of Phonography was published, the system was elaborated into a text-book, called the Manual, with numerous examples and reading exercises in engraved phonography, and sold for one shilling. All the books and magazines issued by my brother during his

long career were published at very moderate prices, considering the cost of their production. The instruction books abounded in illustrations, engraved on wood, while the magazines were produced, from Isaac's transfer writing, by the then slow and costly lithographic process. The income from the sale of the Manual was my brother's main reliance, enabling him to carry on his life's work. A year or two after I engaged in lecturing and teaching, I urged him to raise the price of the Manual to one shilling and sixpence. My pleadings were continued for a long time before he yielded. In one of his letters, written a year after, he said: "I bless you for your persistence in this matter." At another time, in reference to the added income the raised price of the Manual gave him, he wrote: "It will be the salvation of the reform."

There may seem to be a sad lack of romance in the career of Isaac Pitman, in that he did not live neglected and die poor. Prophets and reformers usually do. A man may give a lucky name to a pill, or invent a collar button, and die a millionaire. Occasionally an inventor, like Edison, Bell, or Isaac Pitman, may work a thought into a practical shape, and be abundantly rewarded, for the invention may supply a universal need. It would accord with the past experience of prophets and reformers had Isaac Pitman spent his life in perfecting a useful art, and a reform in letters of signal benefit to the world, and be paid by his generation with persecution and neglect. Luckily his invention was needed, and he was, in the end, amply rewarded for his genius and skill. His greater and more important reform, as he regarded it, the great educational benefit involved in a perfected *typic* alphabet, and a reformed orthography, the world is not prepared to accept, and will accept but gradually; had this alone, been Isaac Pitman's life work, he would, in all probability, have lived and died in struggling poverty. A sadder romance, however, than a struggle with poverty, closed the career of my brother. It came not from the lack, but from the abundance of wealth; not from a cold, unappreciative world, but from those near him, on whom he had heaped abounding favors. It is a story which, for many reasons, we wish might remain untold; but this would be a grave injustice to the memory of the inventor of Phonography, whose latest years were devoted to the sole effort to rectify what he regarded as

a prime mistake in his effort to improve his art. The disregard of his ripest experience, the systematic thwarting of his wishes to rectify his own error,—thus completing his invention,—and depriving him of all rights of authorship, by those to whom he had generously given his accumulated fortune and dedicated the furtherance of the Phonetic reform, he regarded as the cruelest experience of his life. This ungracious closing of a life devoted to "righting the wrong," is reserved for our last chapter, where the story is told in my brother's own words.

A VERY interesting and original attempt at alphabetic reform was made in England in 1865–67 by Mr. Alexander Melville Bell, who called his scheme Visible Speech. It was an effort to provide a universal alphabet that should be self-interpreting, in that the forms of the letters, it was claimed, would picture their sounds by indicating the position of the organs of speech during their utterance. Attention was called to the scheme by a paper read by the inventor before the Society of Arts, who, after showing the urgent necessity for a more philosophic representation of language than is provided by the Roman alphabet, and its consequent inconsistent spelling, claimed that a scheme of visual representation of sounds was possible, by symbols that should not be arbitrary, as are the letters of the Roman alphabet, but such as would be pictures of sound, or, at least, visual indicators of the position of the organs of speech in uttering the sounds, and with such exactness that all possible shades of sounds, foreign and dialectic, would be accurately represented. Mr. Bell did not give his auditors any indication of the actual symbols employed in his new scheme. He hoped that the British Government would recognize the importance of his invention, in which case he would give it to the public on condition that the Government defrayed the cost of providing types for the new forms of his alphabet, and circulate his system for the general benefit.

Isaac Pitman was, of course, deeply interested in Mr. Bell's announced invention, and reprinted his paper in the Phonetic

Journal. He offered to furnish means for casting type for the new scheme,—little anticipating its complexity,—and offered the pages of his Journal for explanation and for the promulgation of it. Mr. Bell declined the offer, for his mind was set on that éclat which the sanction and patronage of the Government would give his invention. But the Government, as might be expected, was as deaf to his appeal as had it been made to the Sphinx.

Mr. Bell had given several interesting semi-public exhibitions in London, demonstrating the practicability of his scheme in correctly indicating the sounds of speech, in which he was assisted by his two sons, Edward Charles and Alexander Graham Bell, the latter now the world-wide-known inventor of the Bell Telephone. In an editorial notice of Mr. Bell's invention, the London Atheneum (5th July, 1865) gives the following account of one those exhibitions:

"We and many others have seen this method tested in the following way: Mr. Bell sends his two sons out of the room, and then invites the company to make words in any language, pronounced rightly or wrongly, and sounds of any kind, no matter how absurd or original, for it is the success of this method that whatever the organs of speech can do, the new alphabet can record. Mr. Bell tried each sound himself, until the proposer admits that he has got it; he then writes it down. After a score of such attempts had been recorded, the young gentlemen are recalled, and they forthwith read what is presented to them, reproducing to a nicety, amidst general laughter and astonishment, all the queer Babelisms which a grave party of philologists have strained their muscles to invent. The original symbols, when read sound after sound, would make a Christian fancy himself in the Zoological Gardens."

Mr. Ellis was deeply interested in Mr. Bell's scheme, and after attending some of the exhibitions, publicly recorded his opinion of the scientific accuracy of representation which the new scheme provided.

There can be no doubt that young Alexander Graham Bell's phonetic training, and assisting in his father's experiments, were factors that led to his invention of the Telephone. How marvelous it would have seemed, when these experiments

were in progress in London, had anyone foretold that in the near future one person would utter sounds, or converse with another, with perfect distinctness, a thousand miles away! Yet today there are many merchants in Cincinnati who daily use the long-distance telephone, from five to thirty minutes, discussing business affairs with merchants in New York. At each end of the line there is a phonographic amanuensis to note down all that is said, and the transcription affords a perfect record of matters that might require many days of correspondence to settle.

The hoped-for aid from the Government never came, and Mr. Bell, in 1867, published, in a beautifully printed and expensive royal-octavo volume, his scheme of Visible Speech, dedicating it, in loving remembrance, to his son, Edward Charles, who assisted in the phonetic experiments.

Those who favored phonetic reform, but had never experimented in devising new typic forms, and therefore did not know the difficulty—say, rather, the impossibility—of supplying the deficiency of the Roman alphabet with new symbols that equal the old letters in symmetry and beauty, were grievously disappointed at the appearance of the new forms that Mr. Bell had chosen for the representation of the sounds of speech. He had to invent forty new forms, and those who had helped Isaac Pitman in the invention of seventeen new and unobjectionable letters were not surprised to find that Mr. Bell's scheme stood no possible chance of general recognition, whatever might be its scientific merits. A printed page of the forms used in Visible Speech was as distressingly ugly and as unwelcome to the eye as Choctaw would be to the ear of a cultured Italian; and a hundred times more unlikely to be generally accepted by the English-speaking world, than Isaac Pitman's phonotypic scheme, in which only seventeen new letters were added to the Roman alphabet. Mr. Bell's analysis of sounds was unquestionably more complete and scientific than any that preceded it, and those who are interested to know what *are* the sounds of human speech, in all their scientific minuteness of variation, can obtain a good idea by reading, or, we would rather say, attempting to read, Dr. A. J. Ellis' article on the 'Sounds of Speech', in volume XXII of the last edition of the Encyclopedia Britannica, page 381. When that most

wonderful analysis of speech is intelligently examined the reader will form a tolerably accurate idea of the difficulties to be encountered in devising any strictly scientific scheme for the representation of human speech, difficulties which will remain insurmountable obstacles, until the world is more civilized, and its ear better cultivated, when probably we shall be gradually rid of many of the unpleasant fricatives, gutturals, aspirates, and nasals, as well as of some close and obscure vowels that now offend the ear when listening to most of the spoken languages of the world.

Mr. Bell is the author of a system of Phonetic Shorthand which is more phonetic than Phonography, in that it recognizes niceties of sound that experience has shown to be unnecessary and undesirable to represent in practical writing. As a stenographic system, it has few of the facile abbreviations and time-saving characteristics of Phonography, and though he was awarded a medal for his invention by the Royal Scottish Society of Arts, it is never likely to be practically used, or regarded as other than an interesting philosophic experiment.

The Bells were a distinguished family of literary elocutionists. The father, Alexander Bell, was a teacher in London, Alex. Melville Bell was a teacher in Edinburgh, and David E. Bell was a teacher in Dublin. After the death of the father, Alex. Melville Bell settled in London, and held the position of lecturer on elocution in University College. David E. Bell, the author of an excellent work on elocution, was my teacher. Through him I came to know the father in London, and I formed a high opinion of his literary and elocutionary ability. I remember he told me that he was the first to punctuate "Milton's Paradise Lost." He was employed by the London publisher, who was about to bring out a fine edition of the work, and my recollection is that he said he was paid £5 for his task, —the sum paid Milton for writing it.

I retain a vivid remembrance of meeting Mr. Alex. Melville Bell before leaving England. I was much struck with the purity and charm of his speech. It was a revelation to me. His utterance seemed to combine the easy, graceful intonation of the talk of a cultured actress, with the strength and resonance that should characterize the speech of a man, and though finely modulated, it was without a suggestion of affectation, either as

to matter or manner. I had never before, and I do not know that I have since, heard English spoken with the ease and delicate precision that so distinctly marked the speech of Mr. Bell.

Prof. Bell's clean-cut articulation, his flexibility of voice, and finely modulated utterance of English, was but an exemplification of what efficient and long-continued training of the vocal organs will do for human speech—and how charming the result! All are aware that many years of special training, under competent teachers, are required to "make a singer," but few seem to realize that Speech is as much an art as song, and is equally difficult of acquirement. It is, however, equally worthy of being mastered. The professional elocutionist who tells graduates from our High Schools and Colleges that they rarely utter a sentence that does not abound in faults of pronunciation, articulation, modulation, and tone, receives scant credit for his criticism. The surprise is increased if he insists that not only are the unaccented syllables of most words mispronounced or slurred, but that many of the simplest and most frequently recurring words of the language (e. g. *of, to, for, that, it, but, as, shall, or, can*, etc.) are, almost always, mispronounced. The trained ear instantly recognizes the hurried slovenliness of *This'n that*, for "This and that;" *This'r that*, for "This or that;" *Yook'n do it*, for "You can do it." "You shall have it," reaches the ear as *Yoosh'l have it*, and "This is for your friend," becomes blurred into *This is fur yur friend*, etc., etc.; and such imperfect utterances pass current for our beautiful mother tongue! It is scarcely to be expected, however, that correct speech—an acknowledged fundamental branch of education—will receive the attention it deserves, till the exact sounds that should reach the ear are pictured to the eye.

AN attempt to reform the English system of numbers as applied to money, weights, and measures was made by Isaac Pitman in 1857–62. To the average American, accustomed to the reasonable and simple decimal system of computation, the pounds, shillings, pence and farthings scheme of the English people appears an old-fashioned, complex absurdity, and its use in the business affairs of life would seem intolerable. English people might retort and say, "If the decimal system is so superior as a scale for money values, why not apply it to weights and measures? Happily it is being done, for the Government, recognizing its desirability, has legalized its application to both measures and weights, as is seen by its employment in official documents.

My brother's attempted reform was more radical than the decimal plan. He thought a change to the duodecimal system would be more desirable, believing it would be attended with less inconvenience to the people of Great Britain than would be the adoption of the decimal scheme. He sought to make twelve, instead of ten, the basis of computation. He would count and compute by dozens and grosses, instead of by tens and hundreds, and he framed a scheme of nomenclature for weights and measures in accord with the duodecimal unit. The duodecimal scale of reckoning he asserted to be the one that furnished the easiest and most natural system of money, weights and measures. He believed it to possess all the advantages of the decimal system of

money, as it could be adapted, in Great Britain, without materially altering the value of the British coinage, and that it would be better to alter the English system of ciphering, and to lay a more convenient basis for arithmetical operations, than it would be to change the coinage and many of the English weights and measures. Twelve, he argued, was more completely divisible than ten, in that it can be divided by 2, 3, 4, and 6 without fractions; whereas ten can only be divided by 2 and 5 without fractional parts. Twelve is already applied to feet and inches; the day is divided into two parts, each of twelve hours, and we are accustomed to count articles of merchandise in dozens and grosses. We cannot divide or fold a sheet of printing paper, for a book, in tens, but can readily do so in twelves: and twelve is already a divisor as applied to English money, in that four farthings make a penny and twelve pence make a shilling. These arguments in favor of a duodecimal scheme would be of little weight in inducing Americans to abandon their convenient decimal money system, especially in view of the fact that this scheme of money values is adopted by all the leading nations of Europe, excepting Great Britain.

I distinctly recall my first experience of the use of the decimal system of money, which occurred soon after my landing in this country, when for the first time I cast up a column of figures, representing the month's family expenses, and expressed, of course, in American cents. On finding that the simple casting up of a column of figures showed the sum total, without further ado, I experienced a pleasurable sense of relief and surprise. Had the monthly expenditure been expressed in English money values, placed in triple column, the farthings, after being added, would have to be divided by four to make pennies; the pence column, when cast up, would be divided by twelve to make shillings, and the shilling column, separately cast up, would be divided by twenty to make pounds. The release from the time-wasting intricacy to which I had been accustomed seemed akin to what walking over a smooth pavement would be after having been compelled for years to travel over cobble stones, and I could not feel other than pleased and grateful for a scheme at once so simple and reasonable.

Isaac Pitman's duodecimal system required two new figures for 10 and 11, and after many experiments he selected ƶ for 10

and ℰ for 11, and had punches cut, matrices made, and type cast for Minion, Brevier, Bourgeois, and Small Pica fonts. He advocated the adoption of the scheme in the Phonetic Journal, which was paged in accordance with this scheme. He kept his private accounts; and the account of the Phonetic Journal Fund, given in the pages of the Phonetic Journal, were in accord with the new method. He seemed for years almost as hopeful of the adoption of the duodecimal scheme as of the success of the Writing and Spelling reform; and of its ultimate general acceptance and use, he entertained no doubt. The "three R's, reading, riting, and reckoning," he urged, would then become so easy and natural that their acquisition would indeed "come by nature."

I do not think many converts were made; if so, I never heard of them. My brother's best friends generally thought that the advocacy of the decimal system would have been a more judicious effort, especially in view of the fact that considerable attention had been given to the subject in England about that time, and a committee of the British Parliament, after a patient consideration of several schemes, all based on a decimal division of money values, had actually recommended an initial step by taking the English sovereign, or pound sterling,—originally a pound of sterling silver,—as a unit of value, and to divide the sovereign into ten florins, the florin into ten cents, and the cent into ten mills. A new coin called the Florin, equal to two English shillings, was designed and minted under the superintendence of Prince Albert, who showed his good taste in giving the English people their first artistically modeled coin. To provide a coin representing a cent, equal to two pence and a half of English money, presented a difficulty. In silver it would be too small, in copper too large. The English penny of the period was a copper, or rather bronze coin, as large and heavy as the American silver dollar. Nickel for coinage was then unknown. Though this metal had been discovered nearly a century before, it was not obtainable in sufficient quantity for coinage till about twenty years ago. The 'nickel' is probably the most used of any American coin, for no other is so interwoven with the daily necessities of life. Nickel bronze is admirably suited for coinage. Pure nickel does not tarnish by exposure any more than gold, and as an

alloy, the American coin being three parts of copper and one of nickel, it makes a thoroughly convenient and unobjectionable coin, besides being profitable to the Government, for twelve nickels can be minted for the face value of one.

After five or six years Isaac Pitman ceased the advocacy of the duodecimal system. His efforts to perfect Phonography, the preparation of new phonographic books, his weekly Phonetic Journal, monthly Phonographic magazines, correspondence, and the furthering of the interests of the Spelling Reform, required all his time and energies, and he appeared willing to leave his superior scheme of numbers to be resurrected by some future generation, if an improvement on the English system should be generally demanded.

My brother, however, never abandoned his conviction that the duodecimal system was the one most worthy of adoption by the English people. In July, 1896, only a few months before his death, he says in the *Speller*: "Reading and writing by sound, and reckoning and writing by dozens instead of by tens; then elementary education will become 'child's play.' My hope for the reckoning reform, counting by dozens instead of tens, has been quickened in the past month by Herbert Spencer's letters on it in the London Times. I formulated the reckoning reform, on the basis of twelve, forty years ago; used it for three or four years, advocated it in my Phonetic Journal, kept my accounts in it, and paged the Journal in it. The phonetic alphabet was then on the anvil, and as I could not do justice to both reforms, I let the reckoning reform slide. A goodly portion of the brain of the English Nation has now taken it up, and I hope we shall hear no more of changing our money, weights, and measures, which are mostly on the twelve basis; but instead of intolerable confusion of altering the value and name of every coin, weight, and measure, we shall merely change our mode of writing them, and introduce a few new coins, measures, and weights on the present basis of values, and give them Saxon names."

FOR nearly thirty years my brother's life was a struggle with poverty and limited means. As long as he continued his costly Phonotypic experiments he was kept poor. The income derived from the sale of his Phonographic works and a great deal which he borrowed, besides liberal subscriptions from friends of the Phonetic Reform, went to pay for new phonotypic punches, matrices, types, and for the paper and printing of books for which there was but little sale, and a great portion of which were gratuitously supplied to teachers who were willing to experiment with them. A sum exceeding one hundred thousand dollars was expended on these phonotypic experiments from 1843 to 1859, exclusive of forty thousand dollars generously invested by Dr. A. J. Ellis. When this outlay ceased, as it did when my brother became convinced that his extended alphabet would not be accepted in his day, and that the first and, indeed, the only Typic reform possible must be a phonetic use of the letters of the Roman alphabet—that is, a gradually Amended Spelling—then Phonography, secured as it was by copyright, began to yield its author an ample revenue. But he continued his untiring labors, and, almost for the first time in his active life, he allowed his thoughts to be diverted for a time to home affairs. He bought land and built a fitting home for his family in a suburb of Bath.* After two or three times enlarging his business premises, he took his two sons into partnership, bought land, and an entirely new printing establishment was built, and presses and machinery of the most improved kind were purchased for his now

*A miniature view of his first house, of dressed "Bath stone," is shown in the illustration heading Chapter 22.

extended business. But wealth to him was without its usual significance. It came unthought of, unsought for, and, as it proved in the end, uncared for. About seven years before his death, he was induced, at the solicitation of his wife and his two sons, to make over to them his entire business, buildings, presses, machinery, stock of books, printing material, his weekly Phonetic Journal, and afterwards, to his Junior partners, the copyright of all his works, which secures the exclusive right to publish during the author's life and for seven years after his death. He was allowed an income which was thought sufficient for his limited needs, though after-events and his letters show that he was doomed, at an advanced age, to feel again the sting of debt and suffer from the restrictive bitterness of straightened means.

The first intimation I received of this strange affair was communicated to me by Isaac's most intimate and long-trusted friend, Mr. John Bragg, of Birmingham, my brother-in-law, who, under date of 17th February, 1891, wrote: "Last autumn I was in Bath and saw a good deal of Isaac. I fear his too-easy nature has suffered the younger ones to nearly strip him of his hard-earned estate. From his own lips I heard enough to show me that he had given up to them and his wife by legal deed nearly everything of future income, reserving only such a modest share as was shown by them would be 'quite sufficient for his wants.' . . . Other people who know more about it are savage over it. The family intended to prevent him giving, as he wishes, to the church or other uses, and they have succeeded, I fear. . . . Some of his relatives will feel the deprivation, and do so now. . . . Meantime, Isaac goes on working as hard as ever."

This disposition of my brother's publishing business, copyright, and estate, revealed an unhappy and unlooked-for state of affairs, being wholly contrary to his often expressed intentions and repeated assurances in his letters to me. The unavoidable inference was that my brother had yielded to influences he could not escape. He sought to purchase peace; but it came not. The fruits of the transference of his property and rights were not long in manifesting themselves. Sir Isaac was soon made to feel that he was not desired at the Institute, and he therefore consented to work at home, but the

sons continued to hand over to him all the correspondence requiring knowledge and thought. Notwithstanding that by the deed of transference he had reserved the right of the general direction of the affairs at the Institute, he found that those who handled the funds and paid the wages were the only ones whose orders were obeyed, and Sir Isaac's wishes and orders were henceforth systematically disregarded. The following is one of many instances which might be given. He wished to publish in phonetic print a portion of Mrs. Barbauld's "Evenings at Home," for which Miss Rosie Pitman, my brother Henry's artistic daughter, had made original illustrations. Under date of 7th July, 1893, Isaac wrote, "I ordered the foreman at the Institute to get the three books made up from 'Evenings at Home' and put to press three weeks ago, and have heard nothing about it since. Neither of my sons cares a fig about the Spelling Reform, and as the Institute is a mile away from me, I cannot work at it as I did when I went there every day. I have so much work in the way of correspondence that it has been impossible hitherto for me to lithograph the first number of the Phonographer [devoted to the 'Improvements' under discussion]. I will, however, again urge the forwarding of these Phonetic Readers." Probably he did, but no regard seems to have been paid to his wishes, for nothing resulted, and the beautiful illustrations were unused.

It was not long after this transference of the usufruct of Isaac Pitman's life's labors, together with the literary and business accumulations of more than half a century, that certain improvements in Phonography presented themselves to the inventor's mind as necessary to the completion of the system. Much thought, innumerable experiments, and extensive correspondence with teachers of the art, had convinced him that the alteration he had incorporated in the English textbooks of '62, and in accord with which a whole generation of phonographers had been instructed, was a great mistake, and the so-called "improvements" he now sought to introduce were, in fact, the undoing of the change of '62, and a return to the system as it previously existed.

The determination of the author to complete his system gave rise to an unlooked-for crisis. Isaac Pitman, it is true, had invented and nearly perfected his system of brief writing;

its development had required the unceasing activities of more than sixty years; it had been welcomed as a much-needed art throughout the English speaking world; it had brought honor and wealth to the inventor, and his unquestioned leadership, it might be supposed, included his right to improve his system in accord with his long and varied experience. But now, when he wished to give the finishing touch to his beloved art, and employ the necessary agencies to carry his views into effect, he found himself beset with most untoward obstacles. The elder son antagonized Sir Isaac at every point, and the younger son, wholly under the influence of his elder brother, joined in thwarting his father's cherished wishes.

To American phonographers and to the majority of the older and more experienced English writers of the system, the changes of '62 seemed unwise and undesirable, and in America they were not adopted. The attempt of the author now to undo a "not-sufficiently-considered" change, and to remove what he termed "a blot upon the system," proved the one serious trouble of his life. It shortened and embittered his latter days, and there is probably not to be found in the annals of literature a more pathetic episode than that recited by my brother of his ineffectual attempts to remedy a former mistake, which he now believed would restore his system to an ideal completeness, and make it coincide with what had been found so admirable and satisfactory to American phonographers.

The author's two sons determinedly opposed their father's views. The proposed changes could not be introduced into the publishing system without being first submitted to the phonographic world; this it was thought would give rise to endless discussion, and the introduction of the changes into the Text Books and other publications would be attended with considerable trouble and expense. These were considerations of less than a feather's weight to the inventor, when set against an admitted improvement of the system; but to the Junior partners, who had never done anything, either to improve or spread the art, and whose views of Phonography were purely commercial, they appeared so formidable that they resolved if possible to avoid the issue.

Sir Isaac's presence at the Phonetic Institute was now no longer desired. He was denied any of the facilities of his

printing establishment, and found himself unable to control a line of explanation or comment in the weekly Phonetic Journal, which he had established and conducted for fifty years. The inventor had improved his system, but he could not revise his books; he had a message of interest to deliver to his thousands of adherents, but he was forbidden to speak through the only organ that would reach the phonographic world. The improvements which had been thoroughly discussed and approved by leading phonographers during three years' correspondence, he now wished to present to the great body of writers of his system for their approval or rejection; but the facilities of his office, which had grown large and efficient by more than half a century of his personal labor, were closed to him. The new conditions, however, were quietly but decisively met. In his eighty-second year, the venerable author opened a new printing office! To a conscience as sensitive as my brother's, and to energies as limitless as his, conviction made action a necessity. Denied the use of his own Journal, he established a new one. He printed and scattered tens of thousands of explanatory documents, and opened an extensive correspondence with teachers the land over; his chief concern being not so much to change the individual practise of phonographers, as to improve and simplify the art for the benefit of countless thousands who should hereafter learn and practise it.

The story of the author's attempt to introduce his improvements and embody them in the Text Books is told in the twenty-five monthly numbers of his *Speller*, beginning January, 1895. He calls it a battle, and a pathetic and tragic interest attends the narration of a contest, bravely and perseveringly continued, and as unceasingly thwarted by his sons, till the day he died. Hundreds of approving and encouraging letters are given month after month in the *Speller*. Among other leading phonographers, Mr. T. A. Reed, who stood in the front rank, strongly indorsed the improvements and urged their general acceptance. He writes, "They are but a return to a safe, convenient practise which I never abandoned." He adds: "I do not wish to enter upon a question of the painful family feud to which this matter has given rise. It grieves me not a little. Sir Isaac Pitman has parted with his copyright and all interests in the phonographic business to his sons.

Probably if he had foreseen how he would be handicapped by such an arrangement, and be deprived of the control of the development of his own system, he would have hesitated before resigning his position at the helm."

The *Speller* for November, 1895, contains, among numerous approving letters, an interesting communication from Dr. Walsh, the Roman Catholic Archbishop of Dublin, highly approving the proposed changes. He writes: "I beg to congratulate you on the success that has at length begun to reward your patient efforts to secure the general acceptance of the great reform in Phonography, for which you have been laboring so perseveringly, and in the face of harassing obstructions, for the last three years. The October number of the *Speller* gives abundant evidence of how notable the advance is that has been made. The reform which you are so heroically struggling to get introduced into the Text Books aims primarily at the removal of what is, undoubtedly, a most serious defect in the system, as we have it in the Text Books—an insuperable obstacle to the progress of the learner." The venerable Archbishop thus closed his letter:

"Allow me to add that I write this letter in the spirit of the closing words of Mr. Thomas Allen Reed's admirable letter in the October *Speller*. 'Everyone who wishes well to Phonography should throw the weight of his influence, however slight it may be, into the scale, and protest against the Inventor having his closing years clouded by the reflection that he is not allowed to present the product of his brain and the object of his solicitude in what he conceives to be its best (because most useful) form.' "

The *Speller*, during the two years of its existence, contained extracts from hundreds of letters, mainly from teachers, expressive of approval and hopes that the improvement would at once be incorporated into the text books. Yet month after month the aged inventor while writing words of encouragement to those who approved of the changes, speaks of the hindrances the firm put in the way of their adoption, and of their continued efforts to keep from the great body of phonographers all knowledge of the improvements the author had made in the Phonographic system. The *Speller* for October, 1896, contains, in addition to a series of letters welcoming the

THE PHONETIC INSTITUTE AT BATH.

improvements, a numerously signed appeal from teachers to the firm urging that a supply of books containing the improvements should be prepared for the approaching winter classes. The appeal concludes, "Hundreds of teachers and thousands of pupils now write the New Style, and it is due to their conviction of its advantages that the teaching books should contain them, at least so far as to give them as an alternative." Isaac Pitman states that he forwarded this appeal to the firm asking the favor of a reply on or before the 10th of September, and adds, "On the 11th of September I was taken ill, and I have been confined to my bed till today, 2nd of October. Thus extra time has been given to the firm to consider their reply to the teachers' simple request. It is an emphatic 'No.' Any further reference of this subject to the publishing firm is unnecessary." This was only a few months before he died. "These improvements," writes Sir Isaac, "have been elaborated by infinite thought, consultation, and practise, since March, 1892 . . . The amount of change in the writing of Phonography caused by the improvements is very small indeed, but the effect in simplifying the system, and the advantage to both teacher and pupil, is great, making the art easier for the learner, shorter for the writer, and more legible and symmetrical."

It seems incredible to American phonographers who have always written in accord with the suggested "improvements," that their recommendation should have given rise to any controversy, much less any determined opposition; and it is apparent throughout the author's recital of the Firm's refusal fairly to consider the results of their father's thought, time,

skill, and patience, that he is chiefly moved and incensed by what he terms "the sluggishness that refuses to test the proposals, and the indolence that will not even look at them."

The approaching end of an heroic career is dimly foreshadowed in the November number of the *Speller*. The author quotes from the letter of an old friend and teacher, "Most earnestly do I trust that your valuable life may be long spared, and that its close may not be disturbed by annoyances and dispute in connection with the great work which is due to your untiring energy and genius." Sir Isaac adds: "The congratulations I receive on my 'recovery' lead me to think that phonographers, who all regard me with paternal affection, would be interested in knowing how I am, and what brought me down. I am recovering, but not recovered. This is my seventh week of confinement. I am as weak as a baby, except in my head, in the power to guide my limbs consciously, and in possessing a sound bodily constitution. I am greatly distressed, but without pain, by shortness of breath, especially after the slightest exertion, such as eating, getting up from my chair to reach a book from the bookcase, and sitting down again. I then pant for five minutes and cannot write until the heart-throbs are equalized. The mitral valve of the heart does not fulfill its duty and allows the blood to leak back, and thus the contraction of the lungs has to force out this portion of the blood twice. The cause of my illness must be traced back to March, 1892. I then commenced a series of experiments and correspondence with the best phonographers with reference to the improvements. Denied access to my own Journal for the interchange of ideas with the best writers, I was thrown back on my pen and the postoffice, and for four years and a half spent the whole day writing to phonographers and pressing my correspondents, especially teachers, to try the New Style, so advantageous to learners. On the 11th of September I took to my bed. On Sunday, 4th of October, my nurse dressed me. From that time I have been gradually but slowly recovering. Without Shorthand I could not have carried on my business during these seven weeks. I am able to keep on the *Speller*, but can no more correspond with phonographers. I have only strength enough to write two or three lines, and then sit up and rest. In this slow work

I occupy about four hours a day. Occasionally, for a day, I am too weak to read or write."

The December *Speller* contains many additional letters of encouragement and approval, and has the following significant words from this sadly worn but unyielding leader: "I regret that I am unable to report favorably of my health, 14th of November. Since the last bulletin, 30th of October, my strength has not increased, and my breathing has become more difficult. On Monday I dictated a portion of the Index of this volume to my clerk, and finished it on Tuesday. The effect of this slight exercise of the lungs was that on Wednesday I was too weak to be dressed." Not one of the "seventy assistants" of his Phonetic Institute could be spared to relieve the venerable Father of Phonography, in his great debility, from this clerical drudgery. After the preparation of "copy" for the December, 1896, *Speller*, Sir Isaac, evidently feeling that his diminished strength would not enable him to continue its publication, wrote and sent a brief notice for insertion in the Phonetic Journal of 5th of December: "I shall be obliged if you will inform the subscribers to my monthly periodical, *The Speller*, that with the December number, now ready, the work will cease as a Monthly, and will appear occasionally, as I have strength to bring it out." (Signed) Isaac Pitman. The notice was *not* inserted.

To keep faith with his friends and followers of the New Style, and to avoid disappointing them, Sir Isaac braces up his declining energies and prepares copy for a new number. The January *Speller* appears, and it is the last. Commenting on the non-appearance of the notice in the Phonetic Journal, Sir Isaac says: "I have been quietly dropped from a share in its management . . . My notice was received by the firm with apparent approval, and the reply [sent by the younger son] was, 'It is all right.' I interpreted this to signify that the letter would be inserted. Great was my disappointment, on receiving a copy of the Journal, to find that it was not inserted. This means a continuance of the war of the two styles. For two years the firm has persistently suppressed the mention of the fact in its *Journal* that there *is* a Monthly publication called *The Speller*; and especially have they, for nearly five years, prevented the vast body of phonographers from knowing that

a great improvement has been made in the system, simplifying it, and reducing the labor of learning and teaching it about one-half. The *Speller* was established to advocate this great improvement in Phonography. Every obstacle was raised to its publication. I have carried on the battle against my partners for nearly six years, and now devolve it on the large body of progressive phonographers. Since March, 1892, neither of the Junior members of the firm of 'Sir Isaac Pitman and Sons' has spoken to me—the head of the firm—on the subject of the 'Improvements.'* They say 'it is not a subject of discussion,' which, I suppose, means that they will continue printing the present big hooks and the double forms of *fr*, *vr*, *thr*, *dhr*, etc. It is for phonographic teachers to say they will not teach these principles, but cross them out in the Instruction Books." To a teacher who writes, "I trust you will have your way eventually," Sir Isaac adds, "I shall work at it till I get it. *The Speller* will be carried on till the improvements appear in the Instruction Books, if I live so long. And if I leave this world before that time, everyone who learns the system, and is a New Style writer, will prefer it to the Old Style, write it, disseminate it, and fight for it." These striking prophetic words in reference to his cherished hopes appear on the last page of the last number of *The Speller*, and were dictated the day before he died.

Two years before, my brother gave promise of a life of a hundred years. But opening a printing office at his advanced age, establishing *The Speller*,—the only means left him to bring his improvements before the phonographic world—and the strain necessarily attending an unequal and ungracious contest, taxed but too severely an organism accustomed to work in an atmosphere of peace. A slight cold was followed by a bronchial attack, making breathing, after the slightest exertion, exceedingly difficult. At length one of the valves of his heart burst. He still worked; when he became unable to write, he dictated, sitting in his chair wrapped in blankets. Writing to his brother Henry a week before his decease, he said: "I get weaker continually. Today I have not been strong enough to be dressed, and have sat in my armchair wrapped in Arctic

*The nature of the opposition with which my brother had to contend, is shown when he writes, "Alfred *never* speaks to me."

blankets. As there is no possibility of getting at a broken valve of the heart, the cause of my weakness, I must expect a continual decrease of strength until the heart gives its last pulsation, and the angelic messengers who wait on the dying draw out the spiritual body from this one. Then I shall have a sound heart, and get to work in my new sphere of life. Don't give yourself any trouble about me. Your affectionate brother, Isaac." The day before he died, the physicians' bulletin read, "Sir Isaac Pitman was much worse yesterday, and his end is almost daily expected. Yesterday the veteran phonographer wrote for his spelling reform publication, *The Speller*, that his life's work was over."

Then came welcome peace and rest, with full assurance of a continued existence where his life's love of usefulness would find corresponding activities in an atmosphere of reciprocal service; where he would not be denied fair play, and where the chilling blight of selfishness and ingratitude would be all unknown. Unusual honors were paid the departed veteran, if silmultaneous press laudations the world over, wherever Anglo-Saxon civilization prevails, may be so interpreted. His body was taken to Woking, 28th of January, 1897, and cremated, according to his wish, attended by his younger son. Simultaneous commemorative services were held in the venerable Bath Abbey Church, at the principal New Church in London, and at his home New Church at Bath. A notable event it was for a reformer and a "Dissenter" to be considered deserving a commemorative service in an English Cathedral. In due time a mural tablet was placed by the city on the house in the Royal Crescent, where he lived and died, to help preserve the memory of an inventor, whose system of writing had been adapted to fourteen European and Oriental languages, and whose life's work, in simple "love of use," had proved him a time and labor-saving benefactor to his race.