Hall Gype-Writer.

SIMPLEST! BEST!

TO
THOMAS HAZZ,
FOR HAS
IMPROVEMENTS IN
TE-WRITING MACHINES
ON THE
RECOMMENDATION
OF THE

HISTORY HIS STORY

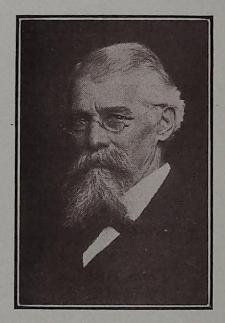
Early History

OF

TYPEWRITING INSTRUMENTS



From Articles
Published in the
"PHONOGRAPHIC WORLD"
1897



THOS. HALL Solicitor of Patents and Mechanician

FROM "PHONOGRAPHIC WORLD" MARCH, 1897

A SUCCESSFULLY OPERATED TYPE-BAR AND KEYED
MACHINE WHICH WAS INVENTED SEVERAL
YEARS DEFORE THE REMINGTON.

It will surprise operators (and the majority of our typewriter inventors) to learn that at least two years before the now famous Remington made its appearance, a type-lever and keyed machine had been invented, successfully operated, and placed on the market in New York. The inventor was Mr. Thomas Hall.

We received, during January of this year, a letter from our old-time correspondent and typewriter enthusiast, Mr. Arthur E. Morton, of London, Eng., which led us to make of Mr. Hall inquiries which brought out the facts contained in this article. For all of this we are indebted to Mr. Morton, whose letter was as follows:

- "DEAR MR. MINER:

You have already benefited by my keen interest in the development of the writing machine prior to 1878, and I am now writing to ask you whether you would be good enough to loan me any photographs, that you may have, exemplifying the ancient attempts to invent a practical writing machine.

I understand that the models of Francis and Beach are still in existence, the latter of which is in New York City, and also that Mr. Hall, the inventor of a machine that was sold on this market some six years back, is a resident in that city, and that he exhibited in 1866 a keyboard machine before the New York Polytechnic Institute. Is a photograph of this machine obtainable?

In return for any kindness you may render me in this respect, I will reciprocate by forwarding you photographs of the models preserved in the National collection at South Kensington. These include attempts by that eminent scientist, Sir Chas. Wheatstone, Hughes' machine for the blind, John Pratt's model (particulars of which have already appeared from my pen in your periodical), and one or two other and minor models. Believe me,

Yours faithfully,

ARTHUR E. MORTON.

December 30, 1896.

On January 11th, we wrote to Mr. Hall, asking for the above information, to which we promptly received the following reply:

"FRIEND MINER:

Yours of yesterday received. In the year 1866 the Keyed Type-bar Typewriter built by me, was exhibited at numerous places in New York City. Principally in the office of Henry C. Bowen, proprietor of Independent, and at Novelty Iron works to Horatio Allen, Pres., and Prof. J. P. Townbridge, Vice-Pres., late Professor in Columbia College. The young man that operated it and exhibited it in various places was Henry W. Vail, now living in Brooklyn; he will be able to state if he took it to the Polytechnic Institute. It was exhibited in

that year to Secretary McCullough, General Banks, Public Printer Seaton, Commissioner of Patents Theacker, who gave me an order for one.

Two instruments were built on this plan in 1865, finished and in use 1866, one of them with upper and lower case letters as complete as any typewriter, went to Paris for the Exhibition of 1867. The other was used in various places and operated at a steady and continuous speed of 400 characters per minute.

THOMAS HALL.

853 Broadway, New York, Jan. 12, 1897.

A CONTINUATION OF AN INTERESTING BIT OF TYPEWRITER HISTORY BEGUN IN LAST MONTH'S "WORLD."

Further referring to the article and fullpage illustration in our last issue on Thomas Hall's keyed typewriter which was invented prior to the birth of the Remington, we have received the following two letters, one from Thomas Hall, the inventor, and one from Mr. J. B. McCune, Treasurer of the Everett Cycle Company at Everett, Mass., who was engaged with Mr. Hall, twenty-two years ago, in its production.

These letters are valuable in that they make typewriter history. Mr. Hall's letter, although containing some personal references to himself, is not marked "personal," or "confidential," and we have, therefore, no reason to suppose that he would object to its publication.

Mr. Hall's letter is as follows:

"FRIEND MINER: The March number of the ILLUSTRATED PHONOGRAPHIC WORLD re-

ceived, for which accept my thanks.

I now see what the inquiry in the Polytechnic Institute meant. I exhibited the Hall at the Polytechnic Institute and Royal Society in London in 1883. The little machine was appreciated by Prof. Hughes and others, etc., etc., etc.

Mr. James Densmore acknowledged my claims, and in 1873 desired me to take up the Sholes & Glidden machine. That was before the machine was shown to the public and before it was taken to Ilion to interest the Remington Company in it. The name Remington was not adopted until after a complete transformation at the Remington shops.

The mention of the Francis and Beach patents in Mr. Morton's letter brings to mind the fact that when I applied for patent I found only those two patents to interfere with me on the broad claim of type bars striking a common centre. I bought both the Francis and the Beach patents, with the privilege of extension, which was then permitted by law.

Hall went into the sewing machine business for fifteen years before he made the so-called "Hall," which he made to keep a promise of fifteen years before.

Yours truly,

THOS. HALL.

New York, March 8, 1897.

Mr. McCune's letter to Mr. Hall follows: FRIEND HALL: Yours of the 10th at hand. I enclose the article you want, as to the best of my memory of our early struggles with the typewriter; also inclose the only scrap of printing that I have left. I have had my wife

'EVERETT, March 12, 1807.

search the house for letters she printed to her mother when the machine was in Bowen's office. They were in the house since we have lived here, but cannot be found. Send me a copy if it is printed, and oblige.

Yours truly,

I. B. McCune."

Mr. McCune's letter to the World follows:

"EVERETT March 12, 1807. E. N. MINER, Esq., Editor, New York:

DEAR SIR: In the March number of the ILLUSTRATED PHONOGRAPHIC WORLD an article appears from Thomas Hall on the typewriter of 1865. A letter from Mr. Hall, wishing me to write you my remembrance of the part the writer took in the production of that machine, and the showing of the same after it was com-

pleted.

In the summer of 1865 the writer and Mr. Hall were employed by the Florence Sewing Machine Co., 505 Broadway, New York, as experts. Mr. Hall was always telling about the ideas he had on different subjects; among them he mentioned an idea he had of making a machine for printing letters, instead of writing them. This, he said, was back in 1858, and that he had at that time made drawings, but did not go any further with it. He gave me the idea by taking two hammers, one in each hand, and holding them so that they would strike a common center. The writer remarked that it was a good idea, and that he would like to build that for him. His reply was: "If you will, I will give you onehalf of the patent."

From that started the building of what we supposed to be the first practicable typewriter. It was completed some time early in 1866. Before the full machine was completed we made a keyboard and engaged a young man, Henry W. Vail, to practice so as to be as expert as possible by the time the complete machine was finished to give it a good showing as possible. When we were ready for the type Mr. Hall and myself called at the office of the Scientific American to get some type to make the first trial. At that time Mr. Hall had a conversation with Mr. Beach about what was wanted, in the way of inventions. Mr. Beach remarked that the time would come when one motion would complete a letter, and he said he would have in the next number of their paper an article calling on inventors to work them out. Mr. Hall and myself decided that we had no time to lose in getting our application in for a patent, which we did at once.

As sa'd before, the machine was completed early in 1866 and was taken to the office of Henry C. Bowen, on Beekman street; there it was exhibited by the writer and Mr. Vail to a large number of the leading business men of New York. The machine was worked by Mr. Vail up to 500 letters per minute; the wrappers for the paper Mr. Bowen published (the Independent) were printed for two weeks, Mr. Vail doing about as many as six of the girls employed for that purpose by hand. Notwithstanding all of the showing of the machine not one of the business men who examined it could see any practical use for it.

At the request of Mr. Furnell, who was the reporter for the Polytechnic Institute, it was shown there. Of all present Mr. Furnell was the only one who could see any use for it. As stated in Mr. Hall's letter, it was exhibited to all of the parties named, and of that number Mr. Theacker, commissioner of patents at that time, was the only one of them that could see any use for the typewriter.

After a seige of about six months exhibition at different parts of the country we gave up ever getting anything out of it, until over a year after that a Mr. Densmore called on us, saying that he had a typewriter with some good ideas and wanted to combine his patent that he expected to get with ours. Why nothing more was done I cannot say, but as the writer understands, the Densmore patents form the base of the Remington typewriter.

I enclose the only piece of the printing that I have left. It was done in Henry Ward Beecher's private office for the New York Independent early in 1866.

Yours truly, J. B. McCune.

Everett, Mass., March 12, 1897."

ONLY A THIRD OF A CENTURY AGO THE AMERICAN PEOPLE COULD SEE NO GOOD IN IT.

"Talking about how hard it was at first to get people who had any money, or influence, interested in the idea of a typewriter, in the early days," said Thomas Hall, of New York (the oldest typewriter inventor now living), to a World reported, last month, "Why, they wouldn't even look at the thing.

much less invest in it. It was as hard a job as it was at first to get people interested in the sewing machine, or to see anything practical, or useful in it. I well remember Elias Howe's first sewing machine, how the cloth was pulled along with notched teeth like a claw-hammer, and the needle worked in and out horizontally, instead of perpendicularly, as in the present machines. I remember that a few, a very few, people were found then who were willing to admit that possibly such a machine for sewing might be of some little use in a very limited way in certain tailors' shops, etc., but as for anything of the kind meeting with popular sale, why, that wasn't thought of .

"I remember, in 1863-no, in 1862; in fact, I am not quite certain about the year, but I was down at St. Louis, and I remember that the war had cleaned me out, and I had nothing left. I went up to Milwaukee, and while there I met a very nice lot of men, and one day I showed some of them my plans for a writing machine. One of them in particular, I remember, was a well-to-do dry goods merchant of Milwaukee. He was enthusiastic over the idea. 'Why,' says he, 'Hall, you don't need to go East to get money to place that on the market; why, there's all the money you want for that right here in Milwaukee.' But he had no idea of the magnitude of the undertaking; he hadn't an idea of the money it would take to get a typewriter properly launched in those days. Yes, sir, it was a big undertaking, that convincing the people that a writing machine was a good thing. Now, you can't convince them that it is not, but fortunes were sunk before the faintest shadow of that idea began to dawn upon the American public."

IN ANY PERIODICAL.

Following our two illustrations of the Hall keyed typewriter of 1865, which appeared in the World for March, the small specimen of its work and correspondence which appeared in the April number, and our interview with Mr. Hall, in last month's issue, we publish below additional letters regarding its early history, obtained for us, at our request by Mr. Hall, which will prove of interest, and of value for future record.

That Mr. Hall was the pioneer in his line there can be no doubt, and that, more than any other man on record of having expressed himself up to that time, he appreciated and foresaw the great need and possible future success of a writing machine. This is all shown by the correspondence below.

The first letter is as follows:

At the close of the Civil War, I found myself thrown upon my own resources for a livelihood, and, without preparation, obliged to enter the ranks of bread-winners. In that day woman had not attained the important place she now occupies, and I well remember my timidity upon assuming the position to which I had been assigned in one of our then finely equipped offices. Unfortunately, I did not even possess the courage born of ignorance, and was but too conscious of my want of business training.

My duties brought me in daily contact with two young artisans, each at the head of his respective department, and from whom, in my eagerness to exchange ignorance for knowledge, I frequently sought instruction, which was always courteously imparted.

During the winters of '65 and '66 I noticed that at the close of business hours each day, when others were taking their departure, these men always returned, after a hasty supper; and prepared for an evening at the bench. Curiosity led me to ask the cause, and after repeated inquiries I was told, as a "state secret," that they were inventing a writing machine.

The idea of a writing machine in those days impressed one as the flying machine does to-day.

After months of patient toil, I was informed that success crowned their efforts, and invited to inspect the result. At their request I wrote a short letter, which until recently I preserved, but, unfortunately, am now unable to find As I drew the paper from the instrument, Mr. Hall said:

"Mrs. H., you are the first woman whose hands have touched a writing machine, an invention which will accomplish for the business world what the sewing machine has for the household, and open a large field of labor for women."

How well that prediction has been fulfilled! Isaac M. Singer and Elias Howe were then prominently before the public and it was prophesied in our office at No. 505 Broadway, that Thomas Hall and J. B. McCone would achieve as great success as they. But when a few weeks ago, for the first time after a lapse of thirty-three years, I again touched the keys of one of the standard typewriters, and at once recognized that in it are still embodied the ideas of that first crude instru-

ment, the question naturally arose: Why have not these two men, the pioneer inventors of this important machine, reaped the reward of their labors?

MARY A. HUDSON.

New York, March 24, 1897.

Direct testimony has just been received by the WORLD from Mr. Henry West Vail in a letter published below.

New York, April 7, 1897.... The typewritten letter referred to is a letter written by Mr. Vail on the Hall keyed type-bar typewriter February 13th, 1867, now more than thirty years ago, and before the first patent for the Remington had been applied for (issue dated June 23, 1868), and before even the invention of that machine had been begun by Sholes, Glidden & Soule, who were incited to the invention of the Remington by a paragraph that appeared in the Scientific American, July 6, 1867, or nearly six months after the Hall keved type-bar machine was actually in the hands of the public and in successful operation. The letter written then by Mr. Vail we reproduce in the centre of this page of the World in exact facsimile.

His letter to Mr. Hall, dated April 6, 1897, which accompanied it, is as follows:

"Thos. Hall, 853 Broadway, New York:

DEAR SIR: Your letter of March 10, asking me to write you my recollections relating to our typewriting efforts in 1866 and 1867, was received, but absence from the city and other important matters have delayed my reply.

The articles from the Phonographic World of March and April, 1897, which you sent me, have interested me, and I hasten to

give you, briefly, what I can recollect, and the only sample of typewriting I have, done by me on your machine. This sample is a letter written by me to my sister, February 13, 1867, two days after the machine was completed, and which I found among my mother's effects after her death in 1888. It is necessarily imperfect, and not intended for public inspection or criticism.

In this connection I think we can both felicitate ourselves, you from the fact of being the inventor and I the operator of the

first perfected typewriting Machine.

It was in 1866 that I was engaged to begin on the typewriter. You furnished me with a wooden dummy with keyboard attachment, so that I might practice and attain a high rate of speed, and be ready to operate the machine as soon as completed. Upon its completion I made tests of various kinds with rapid writers of every kind, and had no trouble in distancing them all. The machine was exhibited at various places in New York city, but principally at the office of John Pondir, in Exchange Place, and at the office of the New York Independent, which was owned and controlled by the late Henry C. Bowen.

Among others who were interested in the machine were Henry Ward Beecher, Horace Greeley, who said he would take the first one made, "for," said he, "then people can read my writing." The Rev. Absalom Peters, a well-known divine and author of considerable note, who had paralyzed his right arm by incessant writing, and had afterward learned to write with his left until that too had become useless from pen paralysis, succeeded in operating the machine by placing one hand in the palm of the other and striking the keys with a stiffened finger. He, too, said he

would like the first machine sold. We exhibited the machine at Bridgeport, Conn., to Wheele: Wilson, Elias Howe, and other important machinists and capitalists there, and at Washington, D. C., where Jay Cook, Mr. Huntington, of the First National Bank, the Sec etary of the Treasury, General Butler, the Public Printer, and many Senators and Representatives gave personal attention and interest to it, and pronounced it a complete success. Just why this machine did not fill the field now occupied by the Remington, as it clearly antedated it, I never knew, but gerting into other business I lost sight of both you and the machine. I regret that it did not make a millionaire of you, for I expected that it would, for you were the "pioneer," and the brain power you put into it should have its recompense, for the machine has exceeded, if possible, the uses we predicted for it, and has furnished pleasant occupation and good remuneration to thousands of the fair sex who might otherwise have had to resort to the needle or the wash tub.

I am, sir, most respectfully yours,
HENRY WEST VAIL

50 Livingstone street, Brooklyn, N. Y., April 6, 1897.

Mr. Hall is still in active business having his office and work shop at 257 39th St., Brooklyn, New York. As SOLICITOR OF PATENTS, he has had years of experience, advising and aiding inventors to perfect and protect their inventions.

The instrument known as the Hall Typewriter was made about the year 1880, while the inventor was a commercial traveler on other business. It was made a piece at a time as opportunity offered, at places he was compelled to stop over

in his itinerancy.

It came to the notice of Mr. D. H. Craige, (the originator of the Associated Press). Mr. Craige was then interested in the Postal Telegraph Company. Through him a company was formed called the Hall Typewriter Company of New York, a factory was established at Second Ave. and Twenty-second Street, New York, in 1881, and a prosperous business done until it was determined by the directors to move to Salem, Mass., in 1885.

Mr. Hall did not approve of the move and refused to go with the concern. The management of the business passed through a number of changes of directors, and finally the death of the principal owner caused the manufacture to

cease in the year 1896.

Many thousands of these typewriters were made. The instruments are in use to-day and a constant inquiry for more comes to the

inventor.

In manufacturing Typewriters it was difficult to make true holes, Mr. Hall found it necessary to make a machine that would sharpen small drills true to size.

When his effort had attained success, others saw the machine (now known as the Ideal Twist Drill Grinder) and wanted them, and since then hundreds have been sold and they are in use all over the country in the leading typewriter factories, electric shops, computing machine factories, etc.

It is to-day the only machine that will positively hold small drills and sharpen quickly and

correctly.

* THE * SCOTT * MEDAL. *

AWARDED BY THE CITY OF PHILADELPHIA.

RECOMMENDED BY

Institute.

1884.

THE MEDAL OF

SUPERIORITY

AWARDED BY THE

. AMERICAN INSTITUTE .

Over the Remington and Caligraph at Semi-Centennial Fair, 1881,