Arrow

TYPEWRITER, CABINET AND SUPPLY CATALOGUE.

THE HAMMOND TYPEWRITER CO.,

447 & 449 EAST 52D STREET,

NEW YORK, U. S. A.

BRANCH OFFICES:

77 NASSAU ST., NEW YORK. 300 WASHINGTON ST., BOSTON.

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HIGHEST AWARDS.

FRANKLIN INSTITUTE, PHILADELPHIA, 1890.

Elliott Cresson Gold Medal.

PARIS EXPOSITION, 1889.
GOLD MEDAL.

NEW ORLEANS EXPOSITION, 1884–1885.
THE ONLY GOLD MEDAL.

LONDON, OCTOBER, 1887.
THE BEST TYPEWRITER FOR OFFICE WORK WHERE SPEED IS REQUIRED.

MECHANICS' FAIR, BOSTON, 1887.
THE ONLY GOLD MEDAL.

EXPOSITION UNIVERSELLE, BRUSSELS, 1888.
DIPLOMA OF HONOR.

AMERICAN INSTITUTE FAIR, NEW YORK.
SPECIAL MEDALS, 1885, 1887.

COLOGNE EXPOSITION, 1890.
GOLD MEDAL.

AND MANY OTHERS.

LEADING POINTS.

SPEED —Highest Record, see pages 17, 18 and 19.

ALIGNMENT—Perfect and Permanent.

TYPE —Instantly interchangeable (all Styles and Languages).

IMPRESSION—Uniform, being independent of touch.

PAPER —Takes any width, also 20 yards in length.

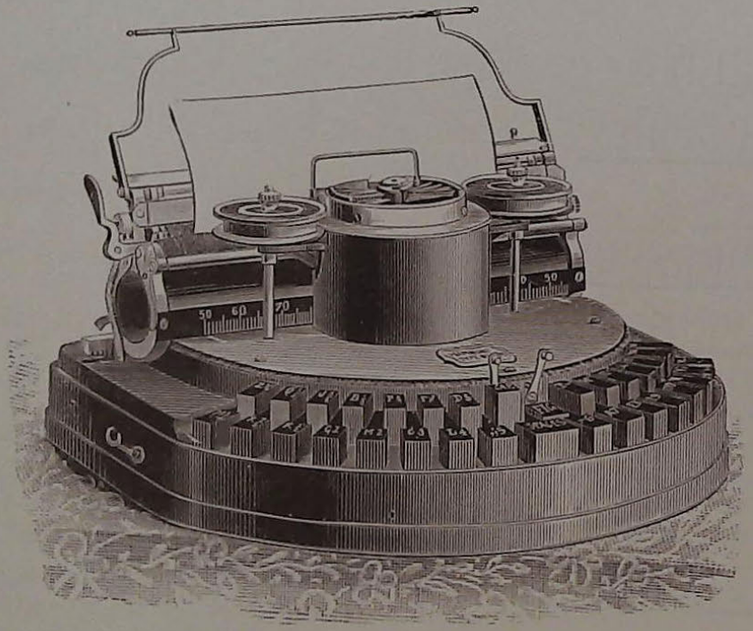
KEYBOARDS—Adapted to the requirements of all operators.

WEIGHT —18 Pounds in Case, hence suitable for travel or office.

BEAUTY —Plated throughout and fitted in highly polished Walnut, Mahogany, and Antique Oak Cases.

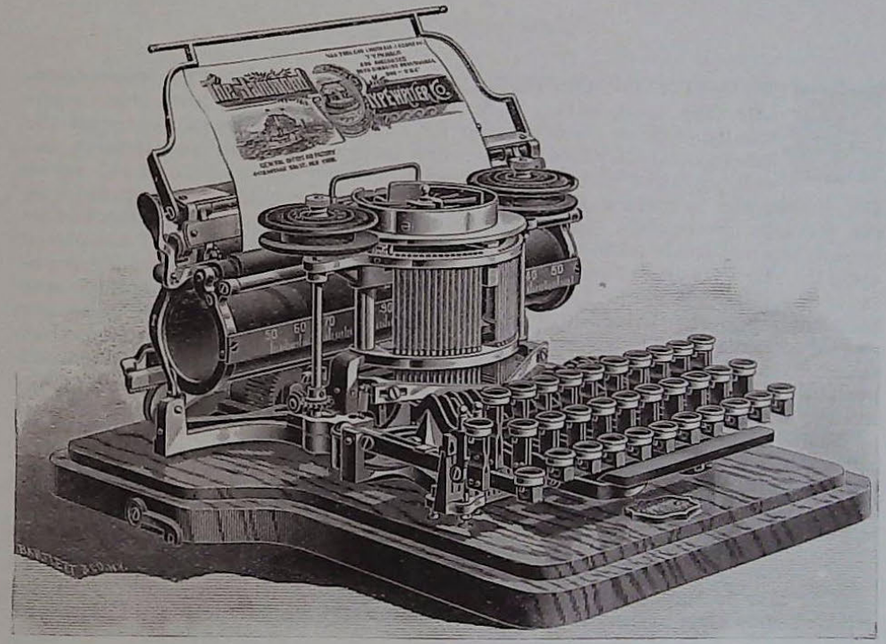
DURABILITY—"Its general mechanical construction is excellent, the wearing surfaces are so extensive and well fitted as to ensure precision of action for a long time, and all of the parts are of such construction that they can readily be replaced."
—*Report of the Committee on Science and the Arts, Franklin Institute.*

"HAMMOND"



IDEAL KEYBOARD.

"HAMMOND"



UNIVERSAL KEYBOARD.

THE INVENTOR OF THE HAMMOND TYPEWRITER, more fortunate than some, having completed his invention, has been able to personally organize and develop its manufacture, as well as control the management of its business. The company has now an extensive and well-organized plant, with agencies covering the whole civilized world. Determined first to make a good machine, it trusted the public, which in the long run gives its appreciation only to good work, and in consequence has reached its present position solely on the merits of the machine. The "Hammond" was placed upon the market a gem of mechanical skill and simplicity, and its increasing popularity is due largely to the fact that it was withheld from the public until it was practically perfect. In few machines has experience shown the need of so few radical alterations. The inventor has been more concerned to produce a perfect machine than to crowd the market with discreditable work. With fifteen thousand machines already in use, we consider ourselves much further advanced than if twenty-five thousand of inferior workmanship were now on the market.

While to a casual observer the machine looks the same now as when it was first put upon the market, a careful examination will disclose many improvements and a perfection of operation which can only come from gradual and careful improvement of the special machinery used in its manufacture and the training of skilled workmen in its production.

OUR NEW FACTORY.

Our new factory building, which for light and cheerfulness can scarcely be equaled anywhere, is situated directly on the East River at the foot of East 52d

Street. In this commodious factory we now have an extensive plant, thoroughly equipped with the most improved appliances and special tools devised and perfected with an inconceivable amount of care.

A new machine must expect the severest criticism and opposition. Upon point after point attacks have been concentrated, until the entire circle has been completed. Naturally enough, it was assailed at first as a new and untried machine, having apparently some good points, but not durable for constant work. Time has rendered this criticism no longer available. The next point of attack was the question of speed. Other machines, with many thousand operators of long experience to draw from, were able for a time to create the impression on the typewriting public that the "Hammond" was a slow machine. The decision of the London Exposition that the "Hammond" was the best machine for office work where speed was required was the provocation for a vigorous propaganda on the part of the opposition. Speed contests were initiated, and starring tours of phenomenal experts were made through different parts of the country. This continued until it came to be believed in many quarters of the typewriter world that our machine, while doing beautiful work, was comparatively slow. We were led at first to certain mechanical tests to ascertain the relative responsiveness of our machine and of others. We discovered that our machine could be operated at the rate of sixteen impressions per second, more than sixty per cent. above the highest speed that could be attained on any other machine. This result was not a little surprising to ourselves. We then determined to test the highest attainable speed in the hands of an experienced operator. It was soon discovered that the machine was capable of being operated at a rate unapproachable by any previously-made public record. The recent contest in public between Mr. Manning, one of our operators, and an acknowledged champion of a leading competitor demonstrated the fact that

our machine could reach the speed of one hundred and sixty-nine (169) words per minute, while the competing machine in the hands of its expert operator only attained a speed of one hundred and nineteen (119) words per minute. As regarding this test we quote from the *New York World*, of August 11, 1889:

THE HAMMOND AND THE REMINGTON MEET FOR THE FIRST TIME, AND IN THE HANDS OF THE SWIFTEST OPERATORS IN THE COUNTRY.

"The Phonographers and Typewriters held a convention at Jamestown, and as "the principal attraction a contest of typewriters was largely advertised. When the "time came for the typewriter contest it was found that the Hammond and Rem- "ington typewriters were represented, but that the Caligraph people had failed to "put in an appearance, although they had given assurances that Mr. Osborne or Mr. "McBride, their two most noted experts, would compete. Messrs. F. W. Stevens, "E. F. Dickinson and L. C. Jagger were appointed judges.

"The parties representing the contesting machines could not agree on what "should constitute an exhaustive test of the speed qualities of their instruments. "The Remington representatives held out for a test on dictation of unfamiliar "matter, while the Hammond representative insisted on the writing of a memorized "sentence and a rigid test of the responsive powers of the machine, giving the fol- "lowing reasons in support of his position: The test desired was not one of the "personal ability of the operators, but of the capabilities of the machine. The read- "ing in uncertain tones of a chapter from Blackstone or Gray's Anatomy, making "it necessary for the operator to give a large share of his attention to the dicta- "tion, would not permit that rapid manipulation which would thoroughly test the "speed qualities of the machine, but would be merely the test of the ability of the

"operator. The writing of a familiar sentence permits the operator to devote his "whole mind to the manipulation, thus insuring the highest possible rate of speed, "the machine's ability to respond to such manipulation being the only true test. "He desired a test of the machines and not of the operators. This also seemed "to be the desire of the audience and the judges, but the Remington people re- "fused to make the test on these lines, and both parties were allowed to choose "their own matter.

"Mr. Manning consented to give the first test, using the ordinary Hammond "typewriter. He wrote a sentence of 18 words, averaging nearly five finger move- "ments per word. This he succeeded in writing at the wonderful rate of 137 "words in one minute, with but five slight errors, the copy showing no evidence of "the great speed with which it was written.

"Miss Orr followed. She very ably and gracefully sustained her reputation as "one of the fastest operators in the world, writing 102 words in one minute, with "12 errors. Additional errors in Miss Orr's work were not counted by the judges, "for the reason that it was clearly seen they were not errors of the operator, but "due to the failure of the machine to respond to her manipulation.

"Mr. Manning then gave another one-minute test, making the phenomenal "record of 169 words, with 685 finger movements, making an average of 11½ finger "movements per second.

"Miss Orr concluded the official programme with a one-minute test from dicta- "tion of familiar court testimony, writing 119 words, 523 finger movements, giving "an average of 8¾ finger movements per second."

The most decisive thing brought to light in this contest is that while the Hammond may be operated at the rate of 11½ impressions per second and do perfect

work, the published result of speed of 8¾ impressions per second on the best of the type-bar machines shows, in its staggering lines and double impressions, that the operator has already surpassed the capacity of the machine.

Again, at Paris, France, the Hammond has demonstrated that it is unapproachable in speed.

DURABILITY.

The average life of the type-bar machine in constant use is about two years; thereafter no attempts are made at repairs, but a new machine is exchanged for the old. Many of our earliest machines have been in constant use for six years, and seem capable of wearing a lifetime, the parts all being attached to a solid bed-plate, and, being interchangeable, can be replaced when worn. The outside limit of expense for remodeling an old Hammond machine with new type-wheel, making it as good as new, is $20.00. So solidly is our machine constructed, and its wearing surfaces so well protected, that, with an occasional exchange of the worn or injured part, the machine is practically indestructible in use.

INSPECTION.

In our assembling department, each workman who makes the final adjustments is guided by a series of printed questions covering every point, so that none may be overlooked. The machine is then examined by another workman, who considers every point, and if in any respect the machine is found imperfect it is returned, and as often as necessary, until every question is definitely and favorably answered. A final inspection, equally thorough, covering every point on the inspection sheet, is made by another inspector, and an impression is printed of every character and numerous combinations of characters, which is retained as a permanent record in the office. Thus no machine goes out of the factory without the assurance that it is perfect.

SCOPE OF MACHINE.

THE KEYBOARD of the Hammond Typewriter has only 30 keys, each of which, by the use of two shift keys, controls three characters (an upper case letter, the lower case of the same, and a numeral or other character). Machines with Greek type-wheels, writing 120 characters, are provided with three shift keys. From 90 to 120 characters can be printed therefore with the use of only 30 keys. Any number of different type-wheels can be used interchangeably on one and the same machine—the substitution of one for the other being made in a few seconds. No other typewriter has so few keys to learn and manipulate, and furnishes so large a variety of characters and styles of type.

The paper carriage has open ends, therefore any width of paper can be used, and without shifting the latter a line nine inches long can be written. The paper occupies a vertical position, so that the writing is always in sight. Any kind of paper may be used, from the finest tissue to library catalogue card. A continuous roll of paper 20 yards in length can be carried in the paper carriage. It is specially adapted for library work, and is the only typewriter which has been successfully used for writing catalogue cards.

The paper when first placed into the machine, adjusts itself, and remains in a perpendicular position, hence when written upon errors are readily observed by the operator, and corrections are easily made. The work being always in sight, tabular work can be executed rapidly and attractively, and with perfect accuracy. The paper carriage will receive a number of telegraph or other blanks, upon which short messages can be quickly written, and the blank removed without disturbing the remaining sheets.

A FEW OF OUR CLAIMS.

1. That the Hammond Typewriter writes in perfect alignment.
2. That use cannot change the same.
3. That the impression is always uniform, being independent of the touch.
4. That the striking of two keys simultaneously can give but one impression, and can do no damage.
5. That it writes the letters close together, as in print, therefore printing more letters to a line.
6. That its keys are relatively so placed as to facilitate speed of fingering.
7. That the touch of the keys is light, elastic and firm.
8. That its paper carriage moves more rapidly than any operator can manipulate the keys.
9. That its capacity for speed exceeds that of any operator.
10. That the touch of the keys is not affected by increase of hammer tension, so that the operator's speed is not diminished in manifolding either a few or many copies.
11. That the keys can be touched promiscuously at the rate of 14 distinct impressions per second, and with perfect alignment.
12. That as the shift keys can be depressed simultaneously with the letter keys, no time is lost in writing capitals or figures.
13. That two rows of keys, like the pianoforte, are more easily learned, and operated with greater facility and speed.
14. That the keys may be depressed and held, rendering the staccato recoil of the fingers unnecessary.
15. That one key may be depressed while another is being released.
16. That any width of paper can be used.

17. That envelopes, cards and narrow paper can be inserted as easily as large sheets.
18. That it is especially adapted for writing on library catalogue cards.
19. That it is especially adapted for tabular work, large statements, etc., as required in Railroad, Insurance and Real Estate offices.
20. That paper may be inserted with the greatest facility.
21. That the paper may be put in with the assurance that it will be straight.
22. That it will print on the thinnest tissue as well as on postal cards.
23. That the type can be cleaned in a few seconds.
24. That type of one style, size or language can be substituted in a few seconds for type of another style, size or language.
25. That the wearing surface of the type-wheel bearings is fifty times greater than that of the type-bar.
26. That corrections can be easily and quickly made.
27. That the ribbon spools can be instantly removed from the machine, without removing any other part of the machine, and a ribbon of another kind or color instantly and easily substituted.
28. That the machine is constructed with such accuracy that any part can be replaced if worn or broken.
29. That the machine has only from 1/3 to 1/4 as many parts as the type-bar machines.
30. That the machine is light, strong and portable, and cannot be thrown out of adjustment or alignment by transportation.
31. That the Hammond is operated with fewer keys than any other prominent writing machine, hence operators have less to remember.
32. That it produces more characters than any other machine.
33. That type-bar operators can use the Universal Hammond without learning a new keyboard.
34. That with the Ideal and Universal keyboards all operators can use the Hammond without special practice.

THE HAMMOND IDEAL AND UNIVERSAL KEYBOARDS.

THE ORIGINAL OR IDEAL KEYBOARD OF THE HAMMOND TYPEWRITER was designed solely with a view to obtaining the greatest ease and celerity of manipulation. The superior mechanical organization of the machine presents no obstacle to the arrangement of a keyboard based upon strictly scientific principles. In other machines the plan of the keyboard is governed by the necessity of so placing the type-bars that the most frequently used letters will not come into collision when rapidly operated. No such limitation is imposed by the construction of the "Hammond," but the natural sequence of letters in the formation of words, and their most frequently recurring combinations have been attentively studied. The most commonly used letters and characters are placed in the middle of the keyboard on either side of the central space-key, with a due regard for the superior dexterity of the right hand. Proceeding upon this principle on both sides of the space-key, the least used characters are placed at the extremes of the keyboard, while those which are most frequently called into service are thus grouped together in the center within a comparatively narrow compass, where the fingers rest upon them naturally and without effort.

The finger-pieces of the keys are of ebony, somewhat resembling the keys of a piano, and like them, ranged in two banks, one slightly higher than the other, in such a manner that there is ample breadth to each key and sufficient space between them. This form greatly facilitates the ready acquisition of speed and reduces to a minimum the chances of confusing one key with another, or of accidentally using the wrong one; though in the latter instance no damage to the machine can possibly ensue. Perhaps no better evidence of the superiority of the "Hammond" keyboard in these respects can be offered than the fact that many *blind* operators in various parts of the country find no difficulty in using our machine.

The shift-keys for writing capitals and figures are also placed in the center of the keyboard, one on each side of the space-key, where they are readily accessible to either hand, and they can, if desired, be operated while another key is being released, thus increasing speed. The key-levers are balanced on their bearings, and

as the action of the impression hammer is entirely automatic, it is unnecessary to use more force in the manipulation of the keys than is requisite to fully depress them. A light, firm touch is therefore the best, as it certainly is the easiest method of operation. The action of the keys merely serves to release the printing mechanism, so a touch more nearly *legato* than *staccato* is more conducive to speed and facility of operation. The force applied to the impression hammer (which can be mechanically adjusted at the will of the operator) is not affected by a light touch. The impression being perfectly uniform upon every character, no care need be taken, as in other machines, to avoid punching the punctutation marks, and certain other characters through the paper.

THE UNIVERSAL KEYBOARD.

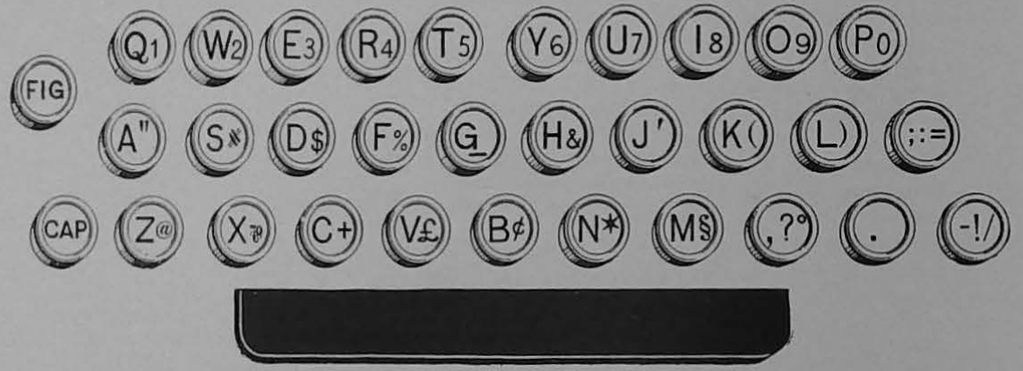
That part of the typewriter public which has used the machine fully appreciate its advantages over others previously existing, not only in ease of learning, but in ease of operation and speed. The highest speed record has been made upon the old keyboard.

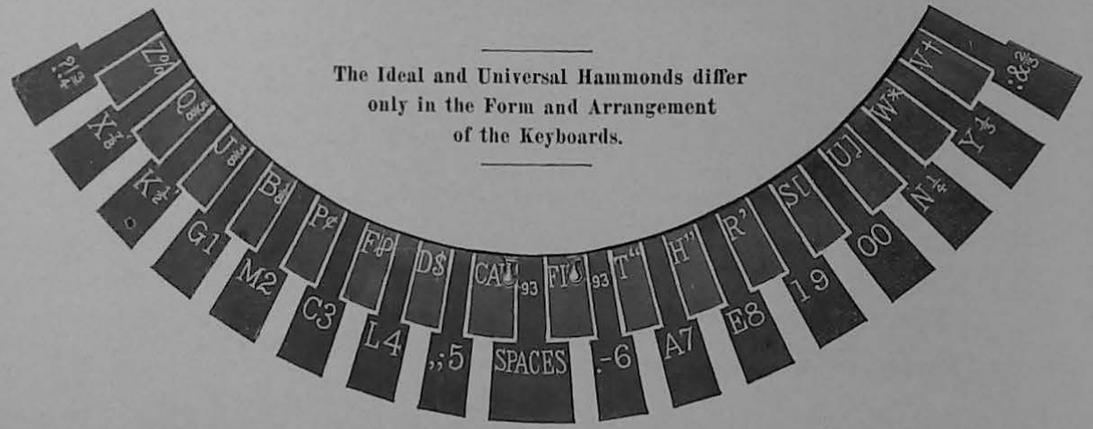
In order, however, to meet the demand of that very large class of operators who find it difficult to change a keyboard once learned, we have put forth our original machine in such form that those familiar only with the straight keyboard may avail themselves immediately of the many valuable advantages of the "Hammond" machine, which are daily becoming more generally known and appreciated. Without special instruction or practice an operator may turn from the old type-bar machine to the new "Hammond," with such advantages as he will easily perceive, and will not be readily deprived of ever after. This machine, for distinction, will be termed the Universal Hammond, while the other, which we continue to manufacture and recommend, will be called The Ideal Hammond.

Teachers will appreciate the advantage of being able to train operators who can adopt either system, as they may find it convenient or advantageous.

On the following page we print fac-similes of both the Ideal and Universal keyboards, the former about three-quarters actual size, and the latter two-thirds.

FAC-SIMILE OF THE KEYBOARD OF THE UNIVERSAL HAMMOND.





The Ideal and Universal Hammonds differ only in the Form and Arrangement of the Keyboards.

FAC-SIMILE OF THE KEYBOARD OF THE IDEAL HAMMOND.

SPEED.

ALL operators on the various typewriters appreciate the importance of using a machine which can be relied upon for rapid manipulation when necessity requires a large amount of work in a short time, but few realize what constitutes the speed of a machine, and are too frequently misguided in their judgment of the typewriters themselves by comparing operators instead of machines. No one at this advanced age would think of judging a locomotive or ocean steamer by the engineer; likewise the speed of the typewriter should not be judged by its operator.

In introducing the "Hammond," it has been our aim and desire to demonstrate to the public that the "Hammond" is not only as fast as any other typewriter, but is capable of speed far exceeding the ability of operators. In demonstrating this fact, we have from time to time had operators, who were accustomed to unfamiliar matter which must be written with great dexterity, practice upon familiar matter a sufficient length of time to enable them to write mechanically, so that their shortcomings could be to the greatest possible extent overcome, and thus allow the capabilities of the machine itself to be recognized. Believing, as we do, that during the past year we have convinced the majority of typewriter operators that a machine should *not* be judged by an operator's ability to turn out a certain amount of work in comparison with some other operator, we will seek to indicate the appreciation of this victory by printing a few extracts from the leading publications of the country, as follows:

[EXTRACT FROM *The Toronto Mail*, SEPTEMBER 1, 1890.]

The exhibition of typewriters at the annual meeting of the Canadian Shorthand Society Saturday evening was of great interest to the audience. All the prominent companies had received invitations from the society to be present with their crack operators and give exhibitions of the speed qualities of their respective machines. * * * The other members of the committee, Messrs. Smythe, Pinkney, Jones, and Perry, joined in saying that "From the work done on the Hammond Typewriter we feel assured that the speed of writing can be limited only by the capacity of the operator, and that at high rates of speed, 150 words per minute and over, the neatness of the writing is unquestionable and unimpaired."

[Extracts from *The Cleveland Leader* and *Morning Herald*, Cleveland, Ohio, Sept. 10, 1890.]

* * * The work done at this high rate of speed was pronounced by the different audiences to be equal to that produced at an ordinary rate, proving that the Hammond Typewriter will respond to any manipulation, and that it is fairly entitled to its established reputation of being the fastest machine in existence. In announcing the result at the Spencerian College, Mr. Loomis said: "The work done at this high rate of speed [172 words] looks as well as if written at the rate of five words per minute." Mr. Caton, President of the Euclid Avenue College, said: "I take pleasure in saying that Mr. Manning wrote 172 words in one minute, with but two errors." Mr. Isaac Richardson, of Richardson's School of Shorthand, said: "After seeing Mr. Manning write 175 words per minute on the Hammond Typewriter I am fully convinced that the machine is so perfect in its construction that its capacity for responding to every distinct touch of the operator is far beyond the ability of man to operate the keys."

[Extract from *The Chicago Times*, September 14, 1890.]

* * * Witnessed by the leading responsible newspaper men of the city, as well as the city managers of two of the leading typewriter companies, he outdid himself by reaching the marvellous speed of 180 words per minute. It is a remarkable fact that the Hammond Typewriting machine has never suffered defeat since the machine came on the market in 1885. Mr. Manning is also a very rapid operator on the other leading machines, and can push them to the extent of their capacity; but owing to their mechanical construction the speed above made is not attainable on them within nearly 20 per cent." * * *

[Extract from *The Sunday Herald*, Chicago, September 14, 1890.]

* * * Sharp at the expiration of a minute, word was given him to stop. The paper was withdrawn from the machine, and the memorized matter he had written was counted word for word. He had written in one minute 170 words. * * * He was not satisfied with what he had done. He tried again, and again his hands flew over the keyboard, and when the minute was up he had written this time 176 words. The people who saw this trial of speed cheered him heartily. * * *

[Extract from *The Evansville Daily Journal*, Evansville, Ind., September 24, 1890.]

* * * Unlike type-bar machines, the perfection of the work does not diminish as the speed increases. * * * There is none of the helter-skelter appearance shown by the type-bar machines. Every letter is equally distinct, as the automatic action preserves the uniform impression, causing every page written on the "Hammond" to present a most beautiful regular appearance. * * *

[Extract from *The Daily Press*, Columbus, Ohio, September 26, 1890.]

* * * The rapidity with which the operator's fingers moved was simply marvellous, and the promptness and accuracy of the machine in responding to the almost instantaneous touch plainly demonstrated that in mechanical construction it is as nearly perfect as it is possible for any machine to be.

* * * Perfectly automatic in its action, the appearance of the work done at the marvellous speed of 170 to 180 words per minute would do no discredit to a business letter or a legal document, so accurately is the absolute alignment maintained.

The Hammond is practically a late invention, but the character of its work, its clear cut type, excellent spacing, and above all its easy manipulation and its high rate of speed, places it in the front rank and ahead of all typewriters now in use.

[Extract from *The Detroit Free Press*, September 9, 1890.]

* * * He succeeded in doing some excellent work, writing 170 words in sixty seconds.

[Extract from *The Pittsburgh Despatch*, September 27, 1890.]

It is almost impossible to believe that 181 words a minute can be written on a typewriter; yet such is a fact, and this phenomenal rate of speed was attained upon a Hammond machine in this city last evening. * * * The copy was turned out in clear, perfect print, with but few errors.

The test was made at the Pittsburgh College of Shorthand, on Liberty street, and there was a large crowd in attendance, including many teachers from typewriter schools. * * * The high rate of speed can be better understood when it is stated that Mr. Manning made 17 letters in one second.

[Extract from *The Evening Bulletin*, Philadelphia, October 8, 1890.]

* * * He wrote the memorized sentence, "Now is the time for all good men to come to the aid of the party," for a minute at intervals, being timed by Dr. Wahl, secretary of the Franklin Institute. Dr. Wahl announced the result as follows: First minute, 150 words; second minute, 160; third minute, 170; fourth minute, over 170; and the result was received with great applause by the audience.

One of the sheets used by Mr. Manning was then placed in the stereopticon and the work was shown projected on the curtain. The regularity and perfection of alignment were unanimously pronounced remarkable.

Later in the evening Mr. Manning gave an exhibition of rapid typewriting before a largely-attended meeting of the Philadelphia Stenographers' Association. Writing the same sentence as before, and being timed by members of the association, he attained a speed of 173 words a minute.

He also showed the rapidity with which the carriage of the Hammond machine will move by writing two letters alternately at the rate of fifteen impressions in a second.

☞**Fac-similes of speed work will be forwarded without charge to any one upon application.**

AN AWARD BEYOND THE REACH OF COMPETITORS.

The Hammond Examined by a body of Scientific and Expert Mechanical Engineers.

A GOLD MEDAL PRESENTED BY

THE FRANKLIN INSTITUTE,

OF THE STATE OF PENNSYLVANIA.

The Committee on Science and the Arts find the Hammond deserving of the Highest Award in the gift of the Institute

THE ELLIOTT CRESSON GOLD MEDAL.

* * * * * *

From the report of the Committee we quote as follows:

"Celerity and certainty of operation, perfection of alignment and great durability in service, are meritorious features which the Hammond machine possesses in an eminent degree, and the Sub-Committee commend it as the BEST TYPEWRITING MACHINE that has come to their knowledge."

* * * The force of the impression is constantly the same, because it is always measured by the reaction of the same spring under the same tension, * * * Letters and printing characters fastened upon only two pieces of light material avoids the difficulty and inconvenience experienced with typewriter machines of the type-bar class when two keys are struck simultaneously. With the Hammond printing form there cannot be a collision between the types. * * * The location of the fulcrum of the levers of each series is varied, so that precisely the same force is used upon each key of the impression mechanism. The several parts of the Hammond machine are secured to a substantial metallic bed-plate, and are characterized by great compactness of construction. * * * Exact adjustment for position of each letter and character is so effectually enforced that the alignment and spacing of letters in this machine are practically perfect. The lightness of the working parts, the type forms being of small radius and light material, permits of a celerity of working impracticable in machines where gravitation chiefly must be depended upon to restore the letters or type to their normal position * * * The liberating mechanisms for moving the paper carriage and making the impression have all the celerity and certainty of action that can be desired, depending upon a spring-propelled wheel controlled by an

escapement similar to the anchor escapement of a watch. * * * The Sub-Committee deem it proper to call attention to the fact that the principle of operation employed in this typewriter imposes no limitation upon the speed of the operator, a fact which the Sub-Committee have verified experimentally. So far as your Sub-Committee have been able to ascertain, the principle of selection employed in this machine is peculiar to it alone. Its general mechanical construction is excellent, the wearing surfaces are so extensive and well fitted as to insure precision of action for a long time, and all of the parts are of such construction that they can readily be replaced. A font of letters may be removed from the machine, cleaned or replaced, or another font substituted with the utmost facility." * * *

THE COMMITTEE ON SCIENCE AND THE ARTS

conclude their report, after a most exhaustive examination of all the leading typewriters, extending over a period of nearly one year, as follows:

"In conclusion, the Committee believe that the invention of the impression and feeding mechanism, and especially of the unique principle of letter selection, as well as the perfection attained in the construction of this instrument, are deserving of the Highest Award in the gift of the Institute, and the grant of the ELLIOTT CRESSON GOLD MEDAL to James B. Hammond, the inventor, is accordingly recommended."

THE FRANKLIN INSTITUTE, OF THE STATE OF PENNSYLVANIA.

The Franklin Institute, of Philadelphia, Pa., for the promotion of the mechanical arts, was founded in the year 1824, through the efforts of Samuel V. Merrick. Shortly afterward a "Committee on Invention" was appointed by the Board of Managers, on whose suggestions Sub-Committees were raised to investigate valuable inventions. In 1834 the Committee was abolished, and in its place was established the Committee on Science and the Arts, to cover not only the ground originally occupied by the Committee on Invention, but to embrace a wider field. From that date to the close of 1886 the Committee was constituted of volunteer members. From 1887 it has consisted of 45 members, chosen at the annual election, 15 each year. The Committee has examined and reported upon a large number of inventions, and its labors have assisted notably in maintaining the scientific reputation of the Institute.

In the year 1848 the late Elliott Cresson, Esq., placed in the hands of trustees a sufficient sum of money to provide a gold medal to be given only for inventions of great originality and merit. It is, of course, rarely issued. One thousand five hundred and fifty (1,550) examinations and reports have been made by the Committee on Science and the Arts, but only twenty-seven (27) of that large number have been awarded the Elliott Cresson Gold Medal. The Hammond Typewriter makes the twenty-eighth so honored.

As an illustration of the value placed upon decisions made by the Franklin Institute, we mention the fact that the United States Government and the Pennsylvania State Legislature have frequently requested the Institute to examine and report upon various scientific subjects, and laws have been enacted according to the recommendations thus rendered. The system of weights and measures, now in force by the Commonwealth of Pennsylvania, was adoped upon the report and recommendation of the Institute.

Familiar as we are with gold medals, diplomas of honor and the high testimonials of juries and committees of experts, we may be excused if signs of special rejoicing are manifested over this late decision. The report bears evidence of careful examination of all machines by this body of scientists, whose judgment cannot be controverted.

The investigation followed fast upon the award at the Paris Exposition, and a famous article upon the typewriters exhibited there, which appeared in the English journal *Engineering*. The high tone of commendation adopted in that article regarding the Hammond Typewriter, emanating from a source so high and reputable, may have prompted this examination by the Franklin Institute.

Our first intimation of its intention to examine typewriters came through a letter, similar to that forwarded to all other companies, requesting us to furnish for examination a machine, copies of patents, etc. With this request we promptly complied, as did all other leading manufacturers. Thus, during the past year, the Committee on Science and the Arts have, in a most exhaustive manner, examined the various writing machines. The adherents of each system were given an opportunity to present in any manner their advantages, and the type-bar companies made a special effort to have their claims recognized.

After a thorough and systematic examination of ALL TYPEWRITERS, the superiority shown by the Hammond at every point so impressed the Committee that they decided to make an award of the highest honor in the gift of the Institute, THE ELLIOTT CRESSON GOLD MEDAL.

INTERCHANGEABLE TYPE-WHEELS.

WE print on this and on page 24 reproductions of actual work written with seven of the principal styles of type. On pages 25, 26 and 27 will be foundfac-similes of our large and varied assortment of type-wheels in various sizes and styles, arranged for the Ideal and Universal Hammond, and containing characters necessary for very nearly all languages and kinds of business In order to enable purchasers to determine what style of letter each wheel contains, we have indicated in the reproductions of actual work the numbers of the various wheels containing the same style of letter. Wheels Nos. 1, 2, 3, 3A, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 21 and 22 are for use on the Ideal, and wheels Nos. 23, 24, 25, 31, 32, 33 and 34 are for use on the Universal.

Other wheels will be added as rapidly as they can be produced.

Type-wheels Nos. 7 and 8 [see page 25] are intended for use on Greek Machines, which are provided with an extra shift-key, with a special ribbon shield, a special hammer attachment whereby the size of the hammer face may be increased or diminished to accommodate ordinary as well as Greek wheels, and with keys having the extra characters engraved thereon. Ninety-character type-wheels can be used on these machines by making a slight change in the adjustments. The price of the Greek Machine is $130.

SMALL ROMAN.

Suitable for private correspondence, tabulating, interlineation, foot notes, and any work containing a large number of words in small space. No. 2 wheel of this style is arranged for the Ideal Hammond, and No. 24 for the Universal Hammond.

MEDIUM ROMAN.

An admirable size and style for all kinds of business correspondence, legal work, &c. Wheels Nos. 1, 10, 11, 14, 16, 18, 19, 21, and 22 of this style, are arranged for the Ideal, and Nos. 23, 32, 33, and 34 for the Universal Hammond.

LARGE ROMAN.

Much admired by clergymen and others requiring large print Wheels of this style, Nos. 3 and 12, are for use on the Ideal Hammond, and No. 25 for the Universal Hammond.

GOTHIC.

Suitable for general and private correspondence, and legal work. The No.4 wheel of this style can be used on the Ideal Hammond only.

CAPS AND SMALL CAPS.

AN ATTRACTIVE STYLE FOR WRITING HEADINGS, CATALOGUE CARDS, ADDRESSES, AND TABULATED WORK. THE No.5 WHEEL OF THIS STYLE IS ARRANGED FOR THE IDEAL HAMMOND ONLY.

ITALIC.

Admired by many for general correspondence. Being of the same size as the No.1, legal work written with the two can be made very attractive. Wheels Nos. 6, 13, 15, and 17 of this style can be used on the Ideal Hammond only.

ATTIC.

SUITABLE FOR WRITING HEAD-LINES, TITLES, AND ARTISTIC WORK. WHEEL NO. 9, OF THIS STYLE, IS ARRANGED FOR THE IDEAL HAMMOND ONLY.

MEDIUM ROMAN, No. 1.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

LARGE ROMAN, No. 3.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

GOTHIC, No. 4.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

ITALIC, No. 6.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

GREEK, No. 8.

?zxqkjgbmpcfld, .taherisounwyv:
0ZXQKJGBMPCFLD; -TAHERISOUNWYVΩ
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=ζξΨκχηβμπ+φλδθ θταηερισουν<ός

SMALL ROMAN, No. 2.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

LARGE ROMAN, No. 3A."

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

CAPS AND SMALL CAPS, No. 5.

?ZXQKJGBMPCFLD, .TAHERISOUNWYV:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

GREEK, No. 7.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¾(⅞⅝½⅛1⅛2)3#4$5 6"7"8'9[0]¼*⅓†⅔
=ζξΨκχηβμπ+φλδθ θταηερισουν<>ως

ATTIC, No. 9.

-ZXQKJGBMPCFLD, .TAHERISOUNWYV÷
-ZXQKJGBMPCFLD, .TAHERISOUNWYV
¾⅞⅝½⅛1⅛2¢3£4$5 6"7"8'9[0]¼*⅓†⅔

The Wheels on this page are for use on the Ideal Hammond only.

COMMERCIAL, No. 10.

?zxqkjgbmpcfld, taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
=%@÷#×1+2¢3£4$5 6“7”8’9(0)°'_"/

GERMAN, No. 11.

özxqkjgbmpcfld, ütaherisounwyvä
!ZXQKJGBMPCFLD; .TAHERISOUNWYV&
¾%@?½:1-2§3£4$5 6„7”8’9(0)¼*_ſ/

GERMAN, No. 12.

özxqkjgbmpcfld, ütaherisounwyvä
!ZXQKJGBMPCFLD; .TAHERISOUNWYV&
¾%@?½:1-2§3£4$5 6„7”8’9(0)¼*_ſ/

GERMAN, No. 13.

özxqkjgbmpcfld, ütaherisounwyvä
!ZXQKJGBMPCFLD; .TAHERISOUNWYV&
¾%@?½:1-2§3£4$5 6„7”8’9(0)¼*_ʃ/

FRENCH, No. 14.

?zxqkjgbmpcfld, étaherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¨%/òçù1à2.3£4$5 6“7”8’9(0)ûôîêâ

FRENCH, No. 15.

?zxqkjgbmpcfld, étaherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
¨%/èçù1à2.3£4$5 6“7”8’9(0)ûôîêâ

SPANISH-PORTUGUESE, No. 16.

?zxqkjgbmpcfld, átaherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYVã
“%/_ç¡1ó2.3£4$5 6“7”8’9(0)ñíéú¿

SPANISH-PORTUGUESE, No. 17.

?zxqkjgbmpcfld, átaherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYVã
“%/_ç¡1ó2.3£4$5 6“7”8’9(0)ñíéú¿

MEDICAL, No. 18.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
=%△℞ʒ31ʒ2¢3£4$5 6“7”8’9(0)℔*_ā/

DIACRITICAL, No. 19.

?zxqkjgbmpcfld, átaherisounwyv:
¸ZXQKJGBMPCFLD; -TAHERISOUNWYV˚
˜˜¨˙˙1⁺2ˇ3ˆ4ˋ5 6´7ʿ8ʾ9°0˜¯¨˘

The Wheels on this page are for use on the Ideal Hammond only.

CAMPBELL'S SHORTHAND, No. 21.

?zxqkjgbmpcfld .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
'%@$# $^{1}1^{2}2^{3}3^{4}4^{5}5$ $6^{6}7^{7}8^{8}9^{9}0$°“”()/

SWEDISH, No. 22.

?zxqkjgbmpcfld, .taherisounwyv:
!ZXQKJGBMPCFLD; -TAHERISOUNWYV&
§%/÷ü+1*2à3Ö4ö5 6"7æ8’9(0)åäÆÅÄ

MEDIUM ROMAN, No. 23.

qazwsxedcrfvtgb yhnujmik,ol.p;-
QAZWSXEDCRFVTGB YHNUJMIK?OL.P:!
1"@2#℔3$+4%£5_¢ 6&*7'§8(°9).0=/

SMALL ROMAN, No. 24.

qazwsxedcrfvtgb yhnujmik,ol.p;-
QAZWSXEDCRFVTGB YHNUJMIK?OL.P:!
1"@2#℔3$+4%£5_¢ 6&*7'§8(°9).0=/

LARGE ROMAN, No. 25.

qazwsxedcrfvtgb yhnujmik,ol.p;-
QAZWSXEDCRFVTGB YHNUJMIK?OL.P:!
1"@2#℔3$+4%£5_¢ 6&*7'§8(°9).0=/

RUSSIAN, No. 31.

ыацвсзедчрфжтгб юійуямикьолъпѣй
ЫАЦВСЗЕДЧРФЖТГБ ЮІЙУЯМИКЬОЛЪПѢЙ
1x-2X"3э?4Э:5N. 6%;7ш,8Ш/9щ(0Щ)

FRENCH. No. 32.

qazwsxedcrfvtgb yhnujmik,olép;-
QAZWSXEDCRFVTGB YHNUJMIK?OL.P:!
1"è2¨ù3$à4%£5_û 6&ô7'î8(â9)ê0ç/

SPANISH, No. 33.

qazwsxedcrfvtgb yhnujmik,oláp;-
QAZWSXEDCRFVTGB YHNUJMIK?OL.P:!
1"@2¨¡3$¿4%£5_Ñ 6&ó7'í8(ú9)é0ç/

GERMAN, No. 34.

qazwsxedcrfvtgb yhnujmik,olüpäö
QAZWSXEDCRFVTGB YHNUJMIK?OL.P:!
1„@2“℔3$#4%£5_- 6&*7'§8(ſ9);0=/

Wheels Nos. 21 and 22 for Ideal machine only. Wheels Nos. 23, 24, 25, 31, 32, 33 and 34 for Universal machine only.

WE GUARANTEE ALL OUR GOODS.

WE desire to call the attention of the public to the fact that we keep constantly on hand a full line of Typewriter Supplies of unexceptionable quality, and parties purchasing of us can be assured that the articles they receive give the best results with our typewriter.

TYPEWRITER LINEN PAPERS.

Our line of Typewriter Papers has been selected with the greatest care, and we believe it to be unexcelled for typewriting purposes. As a guarantee of quality each sheet sent out by us bears our imprint or water-mark. We have these papers manufactured expressly for us by the leading mills of the country, and in finish especially adapted for our machines. The prices will be found as reasonable as its good quality will permit. Sample-book of papers will be mailed free to any address upon application.

HAMMOND TYPEWRITER CARBON.

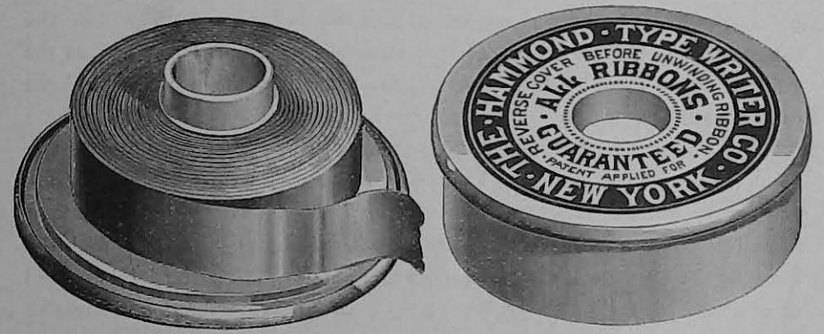
Our Carbon Paper is especially manufactured for the Hammond Typewriter, and much better results can be secured by its use than with any other carbon paper in the market. See page 36 for prices.

TYPEWRITER RIBBON

Our Typewriter Ribbons are manufactured with great care and of the best material. We furnish them in various colors, inked either with copying or non-copying ink. See page 36 for full description and prices. All ribbons guaranteed.

HAMMOND TYPEWRITER RIBBONS.

The cut below shows our New Wide Ribbon, wound on the Hammond Combination Spool and Box. Each box contains a ribbon wider than heretofore used, which will last *twice as long* as the narrow ones. After the ink has been exhausted from one edge of the ribbon, it may be reversed by exchanging spools on the shafts.



THE HAMMOND COMBINATION SPOOL AND BOX.

Longer guide screws must be placed on the machine when these ribbons are used, and in ordering, please be particular to state whether you want WIDE or NARROW ribbons. Guide screws for these ribbons furnished as per page 36.

By putting this spool on the ribbon spool shaft, the ribbon can be wound on the regular machine spools, without soiling the fingers. No extra charge will be made for ribbons wound on these spools.

DROP CABINETS AND TABLES.

FOR a combination of every point desirable in furniture of this class our Typewriter Drop Cabinets are far superior to any other now on the market.

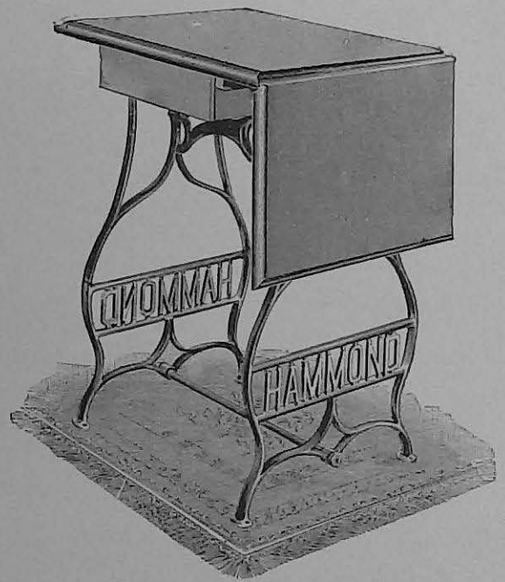
In designing the patterns illustrated in tnese pages the necessity of simplicity of internal arrangement, economy of space both within the cabinet and of clear working space upon the top or desk portion, as well as the advantages of the very best materials, finish, and workmanship have been carefully studied.

Our cabinet contains *no mechanism* whatever, consequently nothing to get loose, broken, or out of order. The typewriter is not a fixture in the cabinet, and can be instantly removed if so desired. When not in use the machine is stowed away in the smallest possible space, where it does not interfere with the knees of the operator. When the typewriter is in operation, the lid is folded upon itself *into* the drop cavity, leaving top of desk perfectly level and clear of obstruction.

A convenient shelf is placed under the drop cavity for the cover of the machine.

The Ideal Hammond is provided with a finger-pull, cut in the wood-work above the keys, and the Universal Hammond is furnished with a similar pull, underneath the keys, for the purpose of drawing the machine from the drop to the forward writing position.

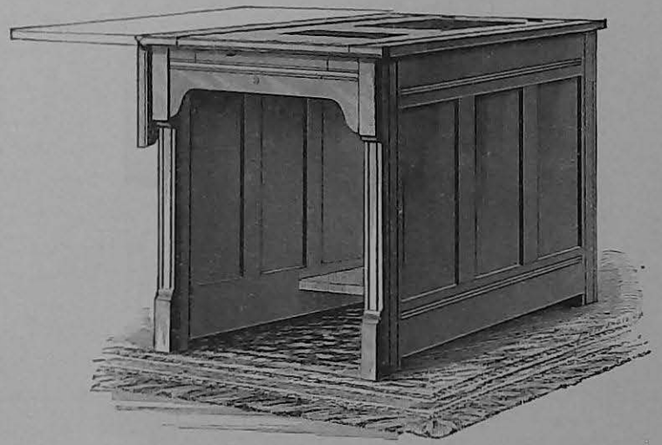
TYPEWRITER TABLE.



Handsomely finished in Black Walnut only . . . . . Price, $5.00.

Size: 20 by 18 inches, 27 inches high, with drop-leaf extended, 31½ by 18 inches. One drawer, veneered on both ends, 13 by 10½ by 2¼ inches inside.

SINGLE DRAWER DROP CABINET, C1.

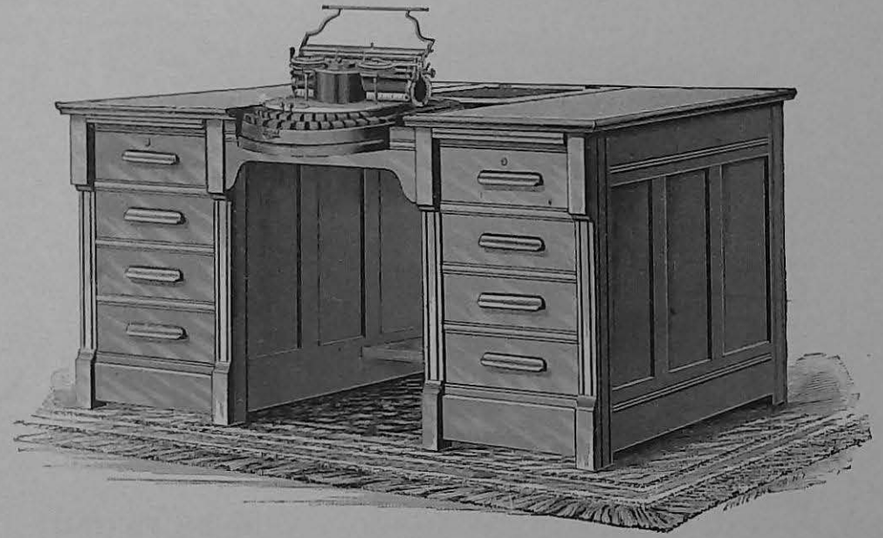


Furnished in Black Walnut, Antique Oak, or Cherry stained in imitation of Mahogany. . Price, $15.00.
Size: 24½ by 31 inches, 29 inches high. Leaf measures 8 by 31 inches. Size of drawer, 17 by 8⅛ by 2⅛ inches inside, provided with a good lock.

FOUR DRAWER DROP CABINET, C4.

Furnished in Black Walnut, Antique Oak, or Cherry stained in imitation of Mahogany. Price, $25.00.
Size: 38 by 28½ inches, 29 inches high, with slide over drawers.

EIGHT DRAWER DROP CABINET, C8, OPEN.



Furnished in Black Walnut, Antique Oak, or Cherry stained in imitation of Mahogany. Price, $30.00.
Size: 51 by 28½ inches, 29 inches high, cloth-topped in centre, solid panel on each side, lower drawers lock automatically.

ROLL-TOP DROP CABINET, R8

Furnished in Black Walnut, Antique Oak, or Cherry stained in imitation of Mahogany. Price, $55.00.
Dimensions same as C8. Substantially made and finely finished.

PRICE LIST.

The Hammond Typewriter is furnished in either Black Walnut, Antique Oak, or Mahogany case, with two type-wheels, or with one type-wheel and table, for $100.00

Additional Type-wheels, each 5.00

RIBBONS.

Copying Ribbon, Black (but copies purple), on spools, $2.00; without spools, $1.00; per doz	9 00
Copying Ribbons, purple, blue, green or red, on spools, each $2.00; without spools, $1.00; per doz.	9 00
Record, or Non-copying Ribbons, same colors, on spools, $2.00; without spools, $1.00; per doz.	9 00
Hektograph Copying Ribbons, on spools, $2.00; without spools, $1.00; per doz	9 00
This ribbon is subject to atmospheric influences; while using utmost care to obtain the best, we cannot guarantee results.	
Lithograph Ribbons, for stone, on spools, $2.00; without spools, $1.00; per doz	9 00
Indelible Copying Ribbons, on spools, $2.50; without spools, $1.50; per doz	15 00
Re-inking Ribbons (except Black Indelible)	65
Re-inking Black Indelible Ribbons	1 00

MISCELLANEOUS.

Canvas Carrying Case, with Straps and Handle	$3 00
Spools, per pair	1 00
Ribbon Shields, each 10 cents; per half doz.	50
Impression Strips, each 5 cents; per half doz.	25
Copy-holders	2 00
Reporters' Books, per doz	1 00
Books of Oiled Tissue, 100 sheets, 8 x 12, per book	20
Oil, per bottle	20
Type-Wheel Brushes, each	10
Ribbon Guide Screws, per pair	10

DROP CABINETS (in Black Walnut, Antique Oak or Cherry stained in imitation of Mahogany).

Style C8, Eight Drawers, size 51 x 28½ inches, 29 inches high	$30 00
Style C4. Four drawers, size 38 x 28½ inches, 29 inches high	25 00
Style C1. Single Drawer and Drop Leaf, size, 24½ x 31 inches (with leaf extended 32¼ x 31 inches), 29 inches high. Drawer 17 x 8½ x 2½ inches inside	15 00
Style D8. Eight Drawers, size and internal arrangements the same as C8, but of more elaborate external design	40 00
Style R8. Roll-Top Cabinet, size and internal arrangement of lower portion same as the other eight drawer sizes, upper portion fitted with convenient pigeon holes and drawers such as usually found in Roll-top Desks	55 00
Table, Black Walnut top, size 20 x 18 (with drop leaf extended 31½ x 18), iron frame work, One Drawer, 13 x 10½ x 2¼ inches inside	5 00

CARBON PAPER.

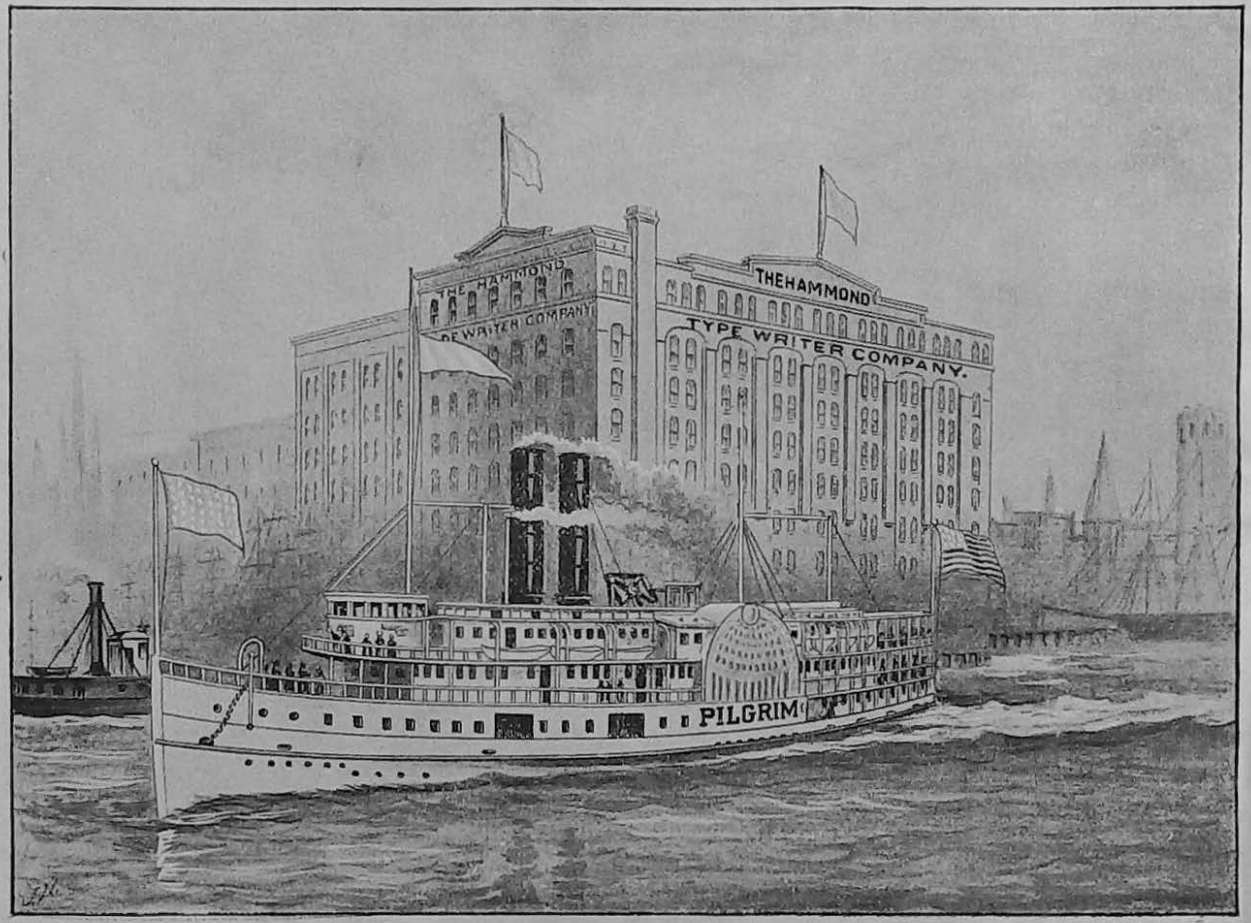
Size, 8 x 10,	per dozen	$0 50	Per hundred	$3 00
8 x 12,	"	0 50	"	3 00
8 x 13,	"	0 60	"	3 50
8 x 14,	"	0 60	"	3 50
9 x 12,	"	0 60	"	3 50
9 x 13,	"	0 65	"	4 00

Boxes containing Typewriters for repairs should contain a notice giving name and address of sender, so as to enable us to identify the machine. A separate letter of advice, giving number of machine, should also be sent to us.

All articles sent to the Company should be plainly marked with name and address of sender. We do not guarantee the safe delivery of goods sent by mail.

Business Headings printed on our Typewriter Papers at reasonable rates. Re-inking involves about three weeks' delay.

Cash must accompany all orders amounting to less than FIVE DOLLARS.


THE HAMMOND
TYPE WRITER COMPANY.
THE HAMMOND
TYPE WRITER COMPANY.
PILGRIM