MUSEO NAZIONALE DELLA
SCIENZA E DELLA TECNICA
LEONARDO DA VINCI

COMMEMORATIVE EXHIBITION
OF THE INVENTION OF THE TYPE-WRITER
UNDER THE AUSPICES OF THE MINISTER OF EDUCATION

ON THE OCCASION OF THE CENTENARY OF THE INVENTION (PATENT
GRANTED TO GIUSEPPE RAVIZZA - NOVEMBER 1855

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PIAZZA S. VITTORE, 21

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The Committee wishes to express its thanks to the following Corporations, Firms and Gentlemen, who contributed to the realization of the Exhibition:

EVEREST STORO - GALLO POMI - LEM - OLIVETTI - REMINGTON - UNIONE ITALIANA CIECHI - Ditta CARESSA - SOCIETA' VETRARIE MILANESI LUCCHINI PIEREGO.

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The Exhibition was decorated by Mr. DE BIZZARDI and Mr. PINTORI.

ARCHIVI
DIGIT
OLIVE

*The Museum, pursuing its program of historical documentation of fundamental factors of progress in the fields of Science and Technics, has taken the initiative of organizing an Historical Exhibition of the sewing Machine, raising the occasion of the centenary of the invention-patent granted to Giuseppe Ramsay from Novara for his «Cucitrice Meccanica».*

*The most primitive evidences, as well as the most recent improvements of the technic and science of mechanic sewing have collected, about thirteen hundred samples of graphic exhibition through centuries: meaning by a graphic act, in its widest sense, the written expression of man's thought: thus supplying the documentation of one of the most spiritual human activity. The cordial thanks of the Museum of Science and Technics are tendered to all those who have contributed to the Exhibition in its various aspects, and to all those who have put at its disposal their precious and generous help of various sort; particularly to those who have completely accomplished the expensive documentation of all manual graphic expressions, accompanied by short historic notes. The administration of the Novara Industrial and Agricultural Chamber of Commerce has deserved special thanks for wonderfully sponsoring the invention of the fellow-citizen and for generously undertaking the illustration of his invention by various valuable publications.*

# ARCHIVI DIGIT OLIVE

From the moment the gift of intelligence was granted to man, the powerful instinctive impulse rose in him to bind his thoughts in visible permanent form, allowing it to become real to other people. Hence the manifold graphic devices to hand it down through ages by means of scrib, drawings of natural objects, or of a conventional figuration of the implements then used by them.

In the course of time, more and more complete and perfect forms of graphic representation, by definitions more or less exact, were developed, intended not to represent merely concrete objects perceptible by eyesight, but also facts of an abstract character, up to the full expression of a thought or abstract ideas, even of philosophical conceptions and religious tenets, up to the ardent elements of human speculation. Such a magnificent edifice of evolution could not have been accomplished, except by degrees and in different forms, taking advantage of peculiar circumstances, and making use of the products of different civilizations.

The ancient skills of cave dwellers in figurative representations, which, even in their primitiveness witness to a sense of art not unknown to some modern masters of colour and form; Egyptian ideograms, which Rosetta stone enabled Champollion to interpret, being again as Dr Schweinfurth says a world full of fascination, which might be symbolically projected on a screen, if only ideographic figures could be induced to grow into animated cartoons; the light Chinese pencil stand characters, which seem to evade from this world bound

Thus the various aspects of alphabet graphic, which has found a place in our Exhibition, form a « Preface » to the present, existing « Machine Civilization ».

Gutenberg's invention was inspired indeed by the last stage of graphic: the alphabet's capital characters got the inventive spark of using alphabet letters as if coming « types », of following the method of the word composition and living matrices just as in Assurbanipal alphabetic characters are drawn on a base line. Middle characters, and (typeright) prose (preferred by Leonardo) grows in the well-known Atlantic drawing on the personals of the history of mobile graphic, as a medium of optimal communication of thought among peoples.

But it is not our task to illustrate this direction and the glorious Italian connected with it, from Aldo Manuzio who in his « centuro » (italic type) and the capital shape of his small volumes, foresaw his longing for graphic harmony and freedom, reading in a quiet Academy, to Giambattista Bodoni, who in his « Typographic Handbook » and lyrical spaces with its many alphabets the reader to the will to attend to behave plainly in life.

The world now bent by a new system of interests and social ties strides towards typographic revolution, after getting rid of all the existing dusty differentiations of Artistic Conscience in building: and French Revolution popularized the new ideas of the Encyclopedias, newspapers and many others have been set to be got used to reasoning only whose interests were to become more linked to governments and thrift.

In the field of such a graphic, documented also by our Exhibition by means of an accurate selection of drawings and typographic materials, the spoken world of thinking people has a goddess of its own, the Press, and her servants are the Typographer and the reliable press — the writing ideal, and its dream growing true: the use of turning the impalpable ether into a gigantic sheet, loud sheet to address all peoples of all Continents.

And behold! already on the horizon, like a dawn encircled with a halo of light, another Ideal appears, the instrument lending a mechanical help even in our most intimate personal writing.

The Italian are to be credited for having created the instrument required by new times. Evolutions are often the outcome of a necessity felt more and more immediately and fashionably by people under different climates: so was it with the birth of the printing machine made ripe by commercial life growing more and more intense, and by the increasing amount of trade.

Pietro Conti from Giovegno in Patio province (1797-1858) and Giuseppe Rastini from Nonata (1811-1865) were the performers of the idea: the former in theory, the latter in practical reality.

Unfortunately the « Comitato Salvatore » failed to be honoured by a commercial success; the fault of narrow-minded concessionaires, and the work of a too urban kind of personal activity, which could not lead to the natural perfection; or even the consequence of the imperfection, which would not wait for the country's evolution to be attained, up to classical perfection, through the irresistible forces of periodical separation and love.

The most favourable position in the exhibition is held by the « Comitato Salvatore », represented by a model which has attributed the palm of this gratuitously promised by Minerva. On to the Museum. It is surrounded by the documents of an invention, the dignity of which can be appraised, removed from the link of previous principles on which to cast a comparative look for worthy and competent.

Giuseppe Rastini, a lawyer, librarian, archeologist and philanthropist, who spent his life in the quiet of his studies and the orderly setting of his thoughts, was the inventor of the printing machine. — but this bright light should before he reached his goal, and it is only a pale, lustreless glory that is destined to the memory of a man, whose life was devoured by the torment of a never finding desire of work, both as an inventor and an artisan.

The idea, perhaps, had been cast — like Cadmus's die — and the inventor conceived how to make it embellish even in its smallest details in a model bound to supply precious archetypes for a rational well equipped machine.

The industrial stage of the typewriter, which allows of its entrance into the manly building of Modern Life, opens with the « Remington ». Over its portal the names of Conti and Rastini must be engraved in golden letters while a bronze



ing Dantesque warning must be heard hovering about: « Ye who enter here, forbear not — your reverent thought be turn — as you lie all barristers ».

The exhibition, to its best phase, gives its homage to the cosmopolitan spirit of our times, by placing by the side of precious relics of ancient art and long models of a past, rich in experience and fecund in remembrances, the most exciting present proof of the machine, proofs of unheard perfection, nearly arising as being the indispensable companions of modern life.

The particular reasons for this exhibition — a date to commemorate and celebrate at Rovigo « Comitato Salvatore » — had limited it to a spot within the orbit of mathematical precision, having enable the marvellous patenting machines, containing operations of high mechanical analysis, and simplifying complex statistical computations, as well as optimistic machines supplementing knowledge, to supply the printing with more and more rapid working devices and more and more accurate compositions.

But yet, whoever enters, who are passing in the hospitable chamber of a Museum which is unique in Italy for magnificence of emblems and wealth of models, think, please, of the huge machines of time, starting from prehistoric times whose ages are Millenniums, to our eve, when the scale of Darwinism is the loveliest joy of a second. And then, applying your attention to the rough page of mouldy walls of caves — and thence to the sheet of paper nicely impressed by an acoustic type through a writing-machine that never knew «spleen» or irritation — consider what amount of efforts and obscure sacrifices Man had to undergo to achieve his final conquest, a bright victory, meaning the purpose of reconciling humanity with the civilization, by his hand answering to daily machines, of the deeds of a distant made visible, for writing, through all centuries.

G. A.

Engravings and paintings on stone, wood, ivory and bone performed the function of messages, besides their aesthetic and religious meaning, within the narrow limits of small communities and a short span of time; but they do not convey any words, only individually binding or isolated images. This primordial kind of writing, made up of points, broken or curved lines or other geometrical figures, drawings of men, animals, vehicles of human figures, may have been meant to carry thousand years (upper paleolithical period).





The hieratic monolithal writing, and the demotic writing for current use, are but complications of hieroglyphs, the oldest documents of which dates back nearly five thousand inscriptions.

In the earliest period, these characters were only symbols representing actual concrete objects (sky, earth, sun, animals); but as a basis for [illegible] the most symbolic element, a consonantal phonetic value, being then used for the transcription of the spoken language, and eventually came to not any alphabet. In a further period, the Egyptian writing was enhanced by the knowledge of Greek characters, and thus became, possessing a dual, successive meaning; and, in 1822, Champollion, the French Egyptologist, succeeded in deciphering the famous inscription of the Rosetta stone.

Early southern writing also, had an ideographic value; but already in the Sumerian period, with a highly civilized people, such a primitive system of expression must have proved unsatisfactory, and gradual passage and combination of emblems into representing fixed syllables and connected sounds must have been used as a somewhat of any word. No accurate history was more widely spread or lived longer than that starting from about 3000 B.C. till about the Christian Era. In fact it was used by a large number of peoples, speaking different languages, i. e., Semitic Sumerians, by Assyrians Babylonians, Canaanites, Persian Elamites, Cassites, Armenians, Persians, Hittites and many others.





From the earliest newspapers and ideograms, namely, skin to hieroglyphs, engraved on building materials, perhaps as standard marks or trade-marks, cretanian finds us an original complicated Linear writing. Scholars have recognized in it two different types: the «Linear A» comprising about 90 marks, and the «Linear B» comprising perhaps 85 marks.

The documents of Linear writing A were of clayey cuneiformed or impressed on clay tablets. Some documents on the Gla Disk, libations and sacrifices to some of the main attendants by innocent Gods.

The primitive hieroglyphic Chinese writing, or vertical lines beginning from the right side, did not undergo a real true evolution in the course of time, in spite of the wide area of a millenary civilization of this people, except for the prevalence of a more and more stylish stylization of its signs.

Thousands of signs, indeed, are required for the Chinese writing, this way being cumbersome and very complicated, and also much work proves necessary of memorizing reading so as the case for learning, with the right WAY, which is used, both for European and for even Japanese. Such hieroglyphic characters are only about 214 hundred. The need of a new simpler system of writing is deeply felt in modern China.





By the time of the discovery of America the highest pre-columbian civilization, that of the Maya people, the inhabitants of the country corresponding more or less to the present Honduras, had already fallen on into decay. Many remains of their enigmatic writings are still extant in the imposing monuments of their architecture, but the manuscripts which survived the ravaging fury of the European conquerors are but few. The interpretation of the documents has revealed the marvellous knowledge that people had in the fields of mathematics and astronomy. At the time of the discovery of America, Mexico was ruled by Aztecs, whose civilization had reached a very high level. The writing of that people had already acquired the phonetic stage and reached a highly advanced interpretative stage, though, considering the pronunciation of the [illegible] of characters, in a way not unlike the present ideograms in Egypt for hieroglyphic letters, some [illegible] were combined together, but have already adopted phonetically to express names of persons and places. But the European invasion and the following persistence of the Latin alphabet stopped any further development of the Aztec writing.

The Cumaean origin of the Greek alphabet is now almost universally admitted. Through a rapid evolution, it supplemented its stock of signs with some particular vowels, attaining a degree of simplicity fully in tune with the polyphonic character of the language. Following the triumph of the Greek art and the mastering of spiritual Greek influence over the ancient world, the alphabet was spread by the Roman conquest, ousting different languages still in their infancy to give to memory and posterity, in common the Etruscan written and the Latin alphabet itself will do, borrowed essentially from Greek. In Christian period, and still later, the Gothic and Cyrillian characters and others as well were also borrowed from Greek. — And for some letters still retained, or restored, from earlier writings.



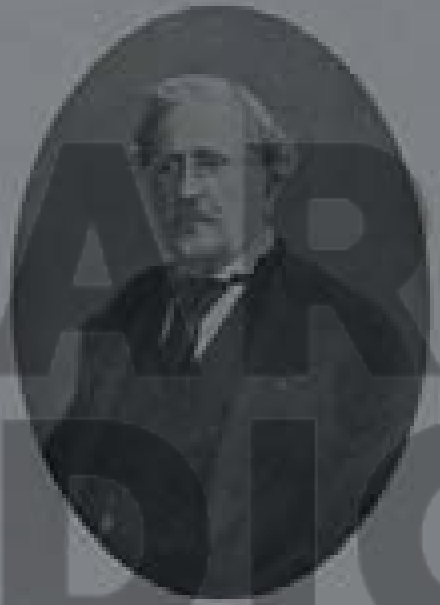


Etruscan inscriptions and documents can be read, though they are not yet understood, because while their peoples signs are known, the language itself is still unknown. The alphabet is, undoubtedly, the archaic Greek one, which the Etruscans perhaps learned from Cuman colonists of Campania, except some signs, whose origin is quite dissimilar. The most documents of this writing are apparently funerary, as also the letters in different objects, as orchard tools or ancient coin, and a more recent one, deeply influenced by Latin alphabet.

## LATIN CIVILIZATION

This alphabet appears in its capital characters, in the very ancient writing on monuments and memorial stones, already fully developed, [illegible] and harmonious. Though derived from the Greek-Etruscan alphabet, having [illegible] those signs [illegible] which [illegible] phonetic correspondence in its language, it soon took up peculiar [illegible] of its own. From the square capital letters on memorial stones, [illegible] important [illegible] derived [illegible] containing, as in a germ, the [illegible] medieval and modern forms of writing, i.e., the capital rustic writing, the capital [illegible] uncial, and the archaic semi-uncial.

In spite of the decay of the Roman Empire, the Latin alphabet prevailed in every part of Europe, especially after the barbarians' attack upon Roman civilization. The Catholic Church having in the meantime adopted Latin in its Roman Liturgy and Bible translation, carried the language wherever the Gospel was preached. The well-known varieties of uncial and [illegible] characters, as well as of Italic — with the peculiar features of the peoples who used them (Visigoths, Longobards, Merovingians, Anglo-Saxons, Irish etc.) — are almost always superficial deformations of the primitive Latin writing, due to peculiar aesthetic requirements of copyists. After the press invention and its spreading, the area of the use of Latin alphabet grew wider and wider. Today it is adopted for most languages, by civilized peoples.



GIUSEPPE RAVIZZA

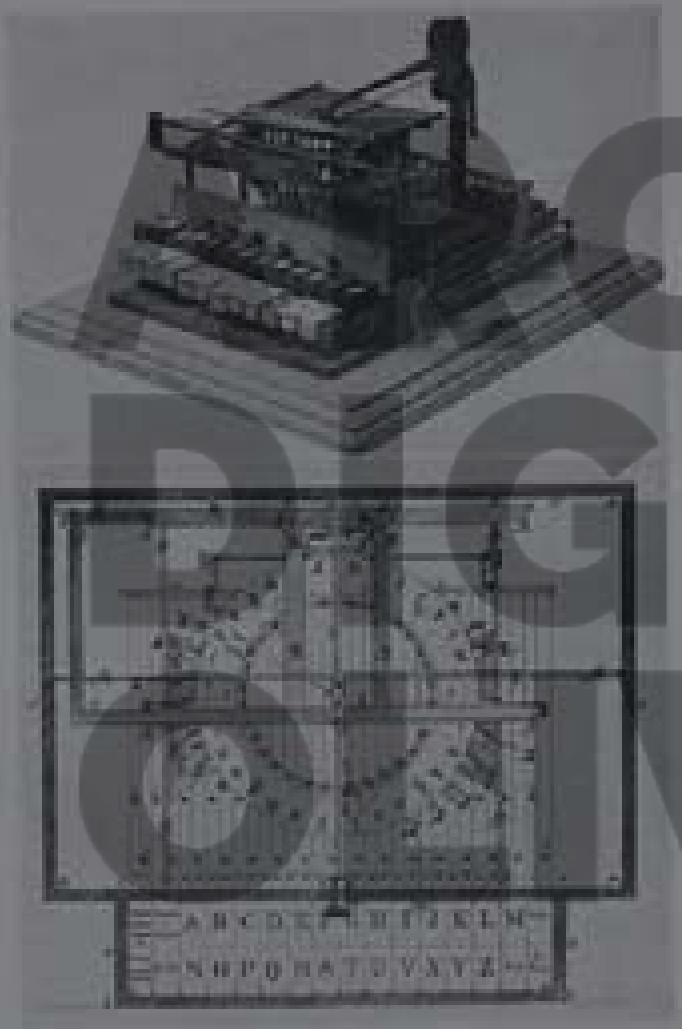
It is curious to ascertain who, and when had first the intuition of a writing machine — as it is the case with many other inventions. The attempts made before the XVIth century, however timidly going in a road being left, represent the prehistory of modern typewriter. Neither the Italian P. Conti (1646) or F. Cassi (1680), nor the Spaniard A. Ballli (1779), the Frenchman Pingeron (1867) and G. Ballet (1892), the Americans H. Mill (1714), the Swedish Polhem and the American Mitterhofer, must be reckoned among its inventors. The key to formulate and find the solution of all technical problems relating to it, and to manufacture an actually writing machine, was the Italian Giuseppe Ravizza (1832).



# Il «Cembalo Scrivano»

*One hundred years: the life of three generations; ephemerally a wide stretch of time, but only one instant in the history of civilization. However slow the first steps of a fertile idea may be, the wheels of its progress will eventually turn quicker and quicker, spurring minutes. The lack of interest, even persecutions, of the early initiators will be followed by a reverent homage to the memory of the leaders of the idea. This is the case with Giuseppe Ravizza, the first Italian inventor of an actually working writing-machine.*

*One hundred years have just elapsed since, on the first of September 1855, the Savoia lawyer, then well known for his quiet charitable activities, as a prominent counsellor and president of Novara civil hospital, and for the learned contribution given to the history of his region by valuable publications, applied to the patent office in Turin — the city of his University studies, crowned by a doctorate in law — for a patent of the invention of a «Cembalo scrivano ad uso cieco» Harpsichord, or a keyboard writing instrument «. More a year — perhaps a week or more — Ravizza had been musing in sleepless nights upon the scheme of a machine to replace the slow handwriting; and he had been working full two years, in the attic of his house transformed into a makeshift factory, at the making of a tiny « piano », whose keys were to form the alphabetical pentagram destined to revolutionize the writing world; nay, the world itself.*

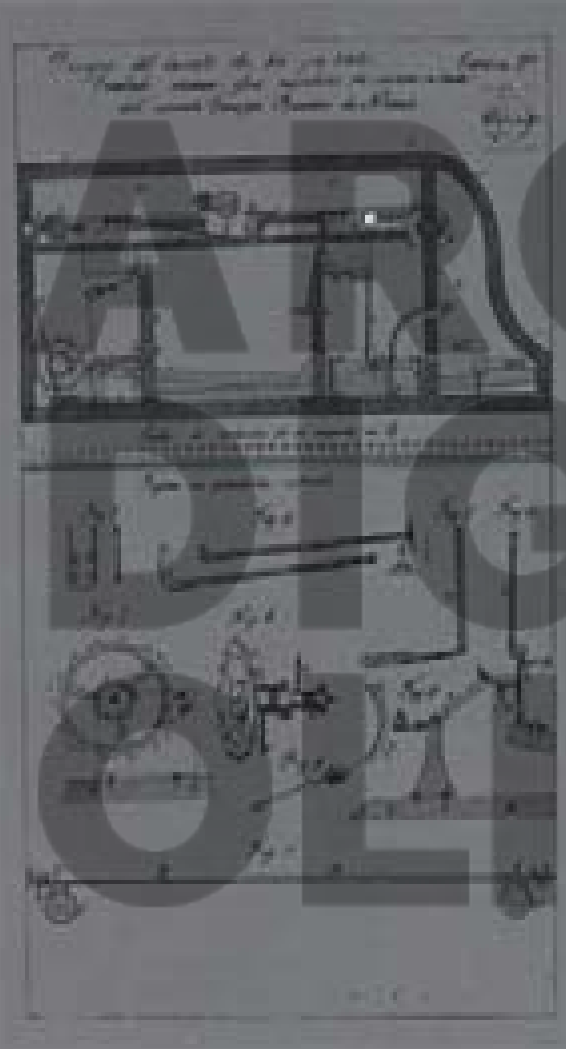



CERIANI SCRIVANO

*The first idea of a Cembalo Scrivano may perhaps be returned to a remote theoretical idea of Pietro Conti from Georgeon, a little village by Novara (May 22, 1796 - May 1836); but its realization went through enormous difficulties for lack of means and experience, in a succession of defeats and victories, which is documented by Conti's Journal, only partially published, of the period 1834-1862. But all the central ideas of the solution of the mechanical-writing problem are found in the sixteen models, the work of the restless brain and industrious hands of the farmer from Novara.*

Such is the working of genial minds: they favour the whole Fatherland, as well as the several striving particular problems which are going to enrich the annals of their regions in the pursuance of the perfecting of the inventions, but in their searchings and while giving themselves, generally, the solutions of the fundamental problems raised by a purpose, they point out in the universal ways as much further away. Winston the problem raised by Keraban himself to his eight parents (Leghorn, 1868), how to make the writing visible to the typist, which was to be translated and then solved in a mechanical way, only by the aid of the optical silhouette also the research of a rational disposition of the letters on the keyboard, which, even at present, is training the efforts of some less ordinary searchers. Pietro Conti's Cembalo Scrivano got pulled from some of his incomparable pen (Leghorn, 1868), a little post-card-size keyboard - Vera del proprio commerciale - (Milan, 1933) and - La Stampa - (Genoa) - a certain Celestino Galli having taken interest in it.

Giuseppe Regalia, a poet, declared to not personally have present at a true performance of the ex-mortal typist in Turin. - Le Grelot Cassieri - (1868) and Luigi Pacherni, the father of the great wrestler (1869) took part to it in Verona national and international exhibitions. One was held in London in 1862, young schools awarded a prize to the inventor; but models and diplomas were like gratifying pieces without great encouragement: a hand without the allowing commercial support.



Giuseppe Rastra had engraved on February 6th, 1773, from Nicola's sketch he had been given (in March 15th, 1841), in Leghorn; and on this score he, - the Latinist, the historian, the archeologist, the philosopher - ... but his favourite subject was not mentioned in the epitaph - about his former laborious life of 68 years.

His rewarding vision of after his Catania victory had been saddened by the close only acquaintance of an American with regard to which we [illegible] reading the Gazettes. A Saxonia merchant, Carlo Pasotti, had invited, made an attempt to form a Company (resulting) for the exploitation of Rastra's patent, to [illegible] Scientific Societies for the American Inventor; but which is more serious to fact, the «Catalano» was far more and more in earning in world not complete with ordinary writing-case law with a calligrapher, to pathetic regulation appearance and besides, the latter's writing was constantly visible about the person, [illegible] characters, besides, were not always in use and [illegible] Marked against the clarity of the paper and for all, it proved more expensive than good handwriting. However, - the die had been cast - and the idea was ripening to counting more advanced to machines more pregnant in consequence, and ready to seize upon any idea, to which hinted by a drawing or supposed by a necessary description, aiming at economy, speed in writing and clearness in reading. The [illegible] principle in the kingdom of speech correspondence had already been grasped to telegraph, - printing - commercial marks, mechanical summaries of the pages of regulary [illegible] of the drudgery of hand-writing in the pages of commercial books, the [illegible] multiplying the potentiality of newspaper printing, to cope with the increasing demand for them, had been long familiar with the managers of American newspapers.

About the end of the nineteenth century, the invasion of foreign machines had started from the Continent, which had satisfied the [illegible] Meaning of the idea of mechanical writing, - the idea of pacing at the disposal of the thinking brain no longer the only hand, but of supplying the recording hand and the falling strength with the ability still to exhibit a clear writing, which anyone could read.

What was now required was a powerful propaganda to accompany the general spirit, and to counteract the aversion for

ARCHIVE
DIGITAL
OLIVE



1 — Aetna.
2 — Aetna (Remington).
3 — Remington.
4 — Hartford.
5 — Columbia.
6 — Hall.
7 — Williams.
8 — Yost.
9 — Smith Premier.
10 — Franklin.
11 — Fitchburg.
12 — Empire.
13 — Barrett.
14 — Oliver.
15 — Granville.
16 — Caligraph.
17 — Edelmann.
18 — Underwood.
19 — Imperial.
20 — Kanzler.
21 — Mignon.
22 — Eastman.
23 — Blickensderfer.
24 — Daugherty.
25 — Oliver No. 2.
26 — Geneva.
27 — Nassilon.
28 — Oliver No. 3.
29 — Jewett.
30 — Oliver No. 4.
31 — Excelsior.
32 — Typewriter for the blind.

SHOLES (1867)

original draftsman plus patents by Sholes, Carlos Glidden and Samuel W. Soule (1868). The type bars are arranged along a rear and under on a concave printing axis from underneath. The paper is carried by a rectangular frame and the writing is not visible. The keyboard is a piano type only. This typewriter — which was the pattern for the first Remington — is very like the «Cardinale Scrivano» patented by Rawson Bidwell four years before.



SHOLES & GLIDDEN (REMINGTON) #2
(Sholes Glidden Typewriter)

In 1872 industrial typewriter manufacture first started at E. Remington and Sons Works, Ilion, N. Y.
The machine is based on the patents of Sholes. Remington typebars are arranged above a horizontal rest of strike the roller from underneath. The writing is not visible to read the written words the carriage must be raised up.
The machine writes only upper case letters. The keys situated on the right side of the machine to let the carriage return and the spacing: it was also possible to operate it by means of a treadle.
Very interesting is the keyboard arrangement, that is practically the same adopted in modern typewriters. This arrangement was adopted with the purpose of avoiding the collision of the type bars: most frequently used letters are placed far from one another.

REMINGTON (1878)

For over 30 years the Remington typewriter, with non visible writing, was largely employed.
In the Remington typewriter model 1 (1878) we find for the first time the small letters besides the capital ones. The upper-case shift key moves the carriage forward. The model exposed is model 1 (1899), with a 42 keyboard.



HAMMOND

Produced for the first time by James N. Hammond in 1880, as a direct development of the Pratt typewriter (1866). Typewriters arranged on a wheel. Typewriter a keyboard type front visible at the right corresponding to the letter actually under the upper typing line.
The printing wheel system of the Hammond machine represents an elementary solution in the typewriter construction followed by more developed ones. Two important characteristics of the system, compared with the type bar principle, are the visibility of the writing and the lower cost. The model exposed is model 2, with interchangeable types arranged on three rows.

EXCELSIOR (1909)

A French model of the American Hitchcock-Ely. It represents one of the first attempts at a portable typewriter with a relatively complete performance, its popularity was due to the reduced weight and to the low cost.
A model of this typewriter with some parts in aluminium was sold in England under the name of Featherweight.



OLIVETTI (1911)

By Thomas Mills. It is another example of unconventional arrangement of the typebars in order to obtain the visibility of writing.
Types are situated on frames hinged on parallel axes. They strike with a downward movement. For writing the capital letters the roller can be moved horizontally.
This typewriter has the intention

HERMAN 1907

A single key typewriter. The type-bearing cylinder strikes the ribbon with force and it is therefore possible to obtain several carbon copies. Left and reverse.



UNDERWOOD 1896

The basic studio typing system designed in 1896 by Franz Xaver Wagner is at the origin of the first Underwood typewriter and represents a new important step in the typewriter history that left far behind all typewriters with an upstrike writing, as well as all other systems of similar system. The typing mechanism includes, between the keyboard and the type-bar a bellcrank that constitutes the touch of the key. The type-bar is fixed on a slot of the plate and it is pivoting on a single wire fulcrum that is easily removable, thus allowing the individual replacement of the typebars. The universal ball is actuated by the typebars and not by the keyboard.

COLUMBUS 1908

The commercial typewriter was well known for a certain time, in spite of its modest performance.
To type a sign the lever must be moved so that the indicator corresponds to the letter and then the lever is pressed down. The types are inked by means of an inkpad.



ILLO 1937

The types are fixed on a rubber platen. The indicator is moved on the dial and depressed in correspondence to the letter desired by means of an ink-pad.


LEXIKON model 820 (Pica)

A typewriter with 120 spaces and movable carriage, one key automatic tabulator with carriage speed checker consisting of an expandable bracket, automatic margin-setter.

LEXIKON BRAILLE WRITER

Typewriter for the Braille alphabet for the use of blind people. The six keys correspond to the six fundamental points of the Braille alphabet. The writing is edited to run immediately legible. The complete keyboard moves from right to left along the writing line.
The paper sheet (27 x 30 cm.) can be typed on both sides with line or point spacing.
Produced by The Royal National Institute for the Blind, London.


OLIVETTI M 1 (1911)

The first Italian typewriter designed in 1908 by Ing. Camillo Olivetti and manufactured at Ivrea. It contained in its time the typewriter reveals a very advanced design and its basic features are those of a modern standard typewriter. It was a high speed machine, thanks to the system of its lever action in which the typewriter strives is eliminated, without causing a loss position and a less speedy action of all the keys. It was one of the first typewriters equipped with a decimal tabulator.

LEXIKON (1935)

A portable typewriter.
The carriage can be tilted forward for an easier carrying. It is a typebasa upstrike machine, nevertheless its weight is very reduced.


INVICTA (1910)

A standard typewriter designed by ing. Giuseppe Ciscato, and manufactured at the Invicta Works, Turin. In Florence was also born in 1911 the second Italian typewriter industry.

OLIVETTI M 40 (1911)

A standard Typewriter produced in 1911. The first typewriter with semi-movable mechanism controlled from the carriage and with the common step for the indented paragraph. This typewriter was remarkable for its neat writing and constant alignment.


SMITH PREMIER (1909)

Manufactured by A.C. Brown, in the first models the typebars strike the rubber from underneath and the writing is not visible. The model opposed is model 10, of 1910, with front stroke and a seven row keyboard arrangement. In the typewriter history Smith Premier is a remarkable example of individual attachments to such an impersonal characteristic as the extended keyboard.




FRANKLIN (1909)

Manufactured by F. Kidder, this typewriter has an overall resemblance to Sommer & Franklin's.
It is a visible writing typewriter. The type action is very simplified, because owing to the considerable arrangement of the keyboard, the key levers are directly connected with the type bars. There is also a ribbon vibrator, so that the ribbon, when the machine is not writing, is kept out of the writing line.


HEBO (1912)

A visible writing typewriter. Two-row keyboard; each setting bar, shaped as a rotating cylinder, which is brought to the height of the printed type by means of three lateral keys.



HARLESS (1910)

A single-key typewriter.
The key rotates on a dial, thus positioning the disk of the types. Types are inked by an ink-pad.
It is not much more than a toy-typewriter, that disappeared very soon from the market, like many other poorly designed machines.

WILLIAMS (1891)

Manufactured in 1891 by John Newton Williams, it is one of the first machine machines with visible writing. The visibility is the result of a particular arrangement of the type bars which strike the platen with an articulated action, starting from their resting position on the ink-pad. The visibility is of one line only.



1907 (circa)

Manufactured by [illegible], who had [illegible] Italian licensee in Reggio in 1924.
The writing is not visible, but for the first time we notice the typewriter that mentions a positive alignment of typing; types are raised by an inked and with a lower results to the typed work.
Each key corresponds to a single type. The keyboard has such an extension that touch-typing is virtually impossible. The universal ball is in the centre, and it includes a universal joint.





ELLIGNON (1901)

A single key typewriter produced by A.B.C., Berlin. It was the most diffused among single-key machines. Its equipment included dial and typebearing wheel for several alphabets.



EMPSON (1907)

Another example of typebar machine with writing visibility. The typebars are equipped by vertical arms provided with keys arranged in front of the roller. The typebars assembly can be moved up and down, moving from the writing position.

Among the systems for the preference followed by the universal « keyboard, with the keys arranged on four rows, the most important is the possibility of the single shifting of the carriage or of the typebars assembly compared to the double or more extended shifting necessary with keyboards with the keys arranged on two or three rows.

PITTSBURG (1898)

Designed by J.D. Dunphy. The first typewriter with front strike. The writing is completely visible.
The ribbon, with a normal height of 12 mm (1/2"), is supported by a horizontally fitted spool. The shift key raises up the type-bars assembly and depresses the keyboard.



DARTIT (1907)

At Canadian origin, this typewriter was designed by William P. Kidder, the manufacturer of the «Franklin».
Its design is completely different from the Darker machines and represents another attempt to obtain the visibility of writing.
The type-bars have a very anonymous, with a horizontal sliding movement; the key pushes the bars with a high pantographic ratio.
In this way the typebars instead of striking the roller by inertia, like in other typewriters, are pressed against it.
This typewriter was on the market for a very long period.

OLIVETTI M 20

The Olivetti typewriter M 20 was a refined design of the model M 1 and Italian as well as foreign experts judged it as the most complete typewriter then on the market. The most important new features of this model were as follows:

— the guide of the carriage and of the escapement are on ball-bearings
— simplification in the number and in the form of the parts of the typewriter mechanism



IMPERIAL (1908)

Typebars strike the roller downward and are directly actuated by the corresponding keys. The depression of the shifting key moves the keyboard and the typebar assembly.



KANZLER (1910)

This typewriter offers a very curious example of the combination of two typing systems: the basket-bar and the pressure system. Four different keys activating a particular lever system based on a geometrical principle, bring the types, which are arranged in groups of eight, against the roller by means of a push rod.

GRANDVILLE AUTOMATIC (1896)

An improved model of the Wyld typewriter (1890), of Bernard Island, Allen, Dayton.
The typebars mechanism works with the gooseneck system; the letters are arranged on two rows. The shifting mechanism moves the keys assembly; to the keyboard there are included two keys generally absent in preceding typewriters; they are the carriage return and line spacing key, and the carriage release key.



LUMIERE (1914)

A typewriter without keys, designed by Frank Lumiere, Brooklyn, instead of the keyboard we find a disk with a series of letters around the edge. The disk can oscillate around its axis, and remains in each position, a type-bearing shuttle; the striking of a type on the paper is obtained by a slight pressure on the center key, that activates a small hammer. This single press mechanism, common to all the types, makes this typewriter a very economical product.

Cognome LAMBORGHINI
Nome BRUNO ROMANO
nato il 25/07/1936
(atto n. 795 P. I S. )
a FERRARA(FE) ( )
Cittadinanza ITALIANA
Residenza IVREA
Via VIA SOANA n. 7
Stato civile CONIUGATO
Professione DIRIGENTE INDUSTRIALE

CONNOTATI E CONTRASSEGNI SALIENTI

Statura cm. 180
Capelli GRIGI
Occhi CASTANI
Segni particolari

Firma del titolare
IVREA 15/07/2004
Per ordine SINDACO
Il Funzionario Incaricato

impronta del dito indice sinistro



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