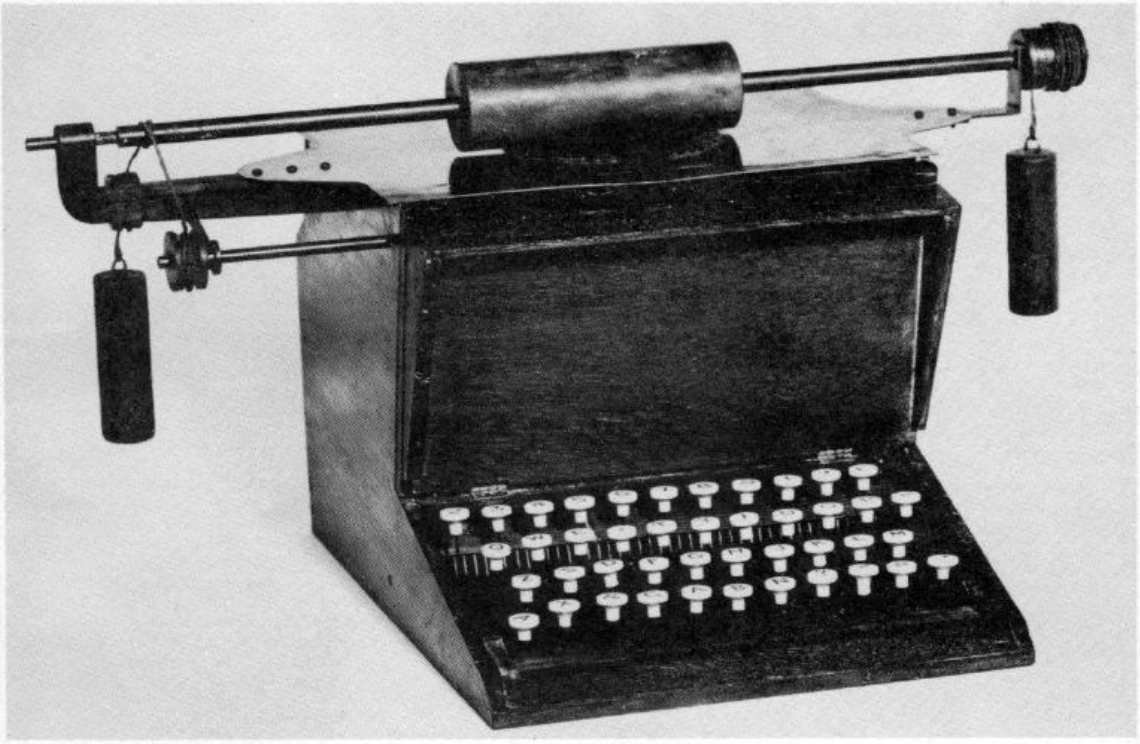
THE CARL P. DIETZ

COLLECTION OF TYPEWRITERS



BY
GEORGE
HERRL

PUBLICATIONS IN HISTORY NO. 7

THE CARL P. DIETZ COLLECTION OF TYPEWRITERS

by GEORGE HERRL

PUBLISHED BY ORDER
OF THE BOARD OF TRUSTEES
MILWAUKEE PUBLIC MUSEUM
1965

CARL P. DIETZ

PREFACE

In the presentation of this catalog of the Carl P. Dietz Collection of Typewriters, we pay tribute to the donor's many years of devotion to a cause. As Milwaukee was the birthplace of the first practical, commercially produced "writing machine," Mr. Dietz felt that the repository of an outstanding collection along with associated material should be here, his home. Ultimately he developed, by means of correspondence and travel, what is the world's most complete collection of its kind. This he donated to the Milwaukee Public Museum, along with archive materials including illustrations, advertisements, documents, and other historical data.

In this volume 308 specimens are listed, and all noticeably different types and models illustrated, along with a brief historical and typological identification of each. Included are not only commercial examples but also experimental models and reproductions of otherwise unavailable basic types.

To Christopher Latham Sholes of Milwaukee, editor of the Milwaukee Sentinel during the Civil War, a onetime chief operator of the local office of the Western Union Telegraph Company, inventor of a method of addressing newspapers and of a machine for numbering the pages of blank books and bank notes, and Collector of the Port of Milwaukee, belongs the honor of conceiving the basic principle of what he called a typewriter. Developmental work started in 1867 and on July 14, 1868 a patent was granted for the device. The patentees were C. Latham Sholes, Carlos Glidden, and Samuel W. Soule. The experimental work was done in C. F. Kleinsteuber's machine shop, then on State Street, between Third and Fourth streets, Milwaukee.

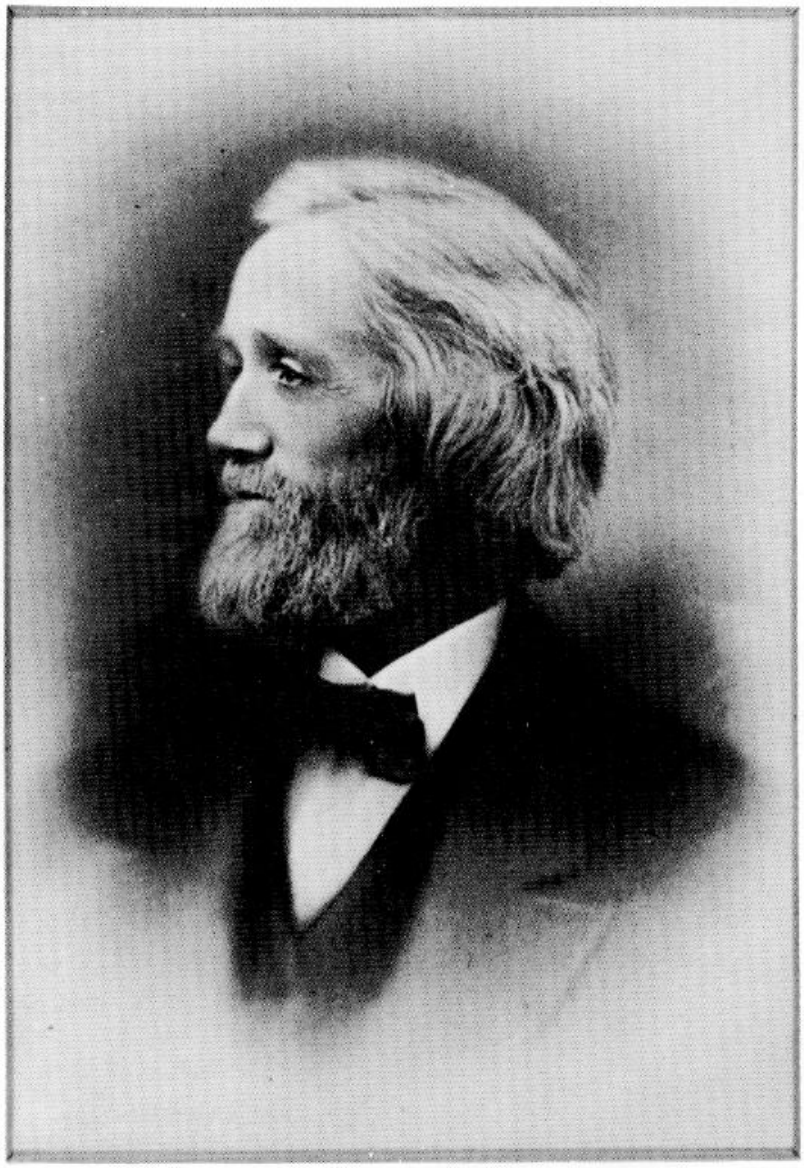
The first commercial form, the Sholes and Glidden typewriter, was marketed by the Remington Company in 1873, to be followed, in 1878, by the first machine under the name of Remington. During the succeeding years a veritable flood of types was invented, or actually placed on the market, many of them enjoying a happy, although brief popularity.

The compiler of the present volume, Mr. George Herrl, has been intimately associated with the collection since its nucleus was first presented to this Museum. From 1937 up to the present, specimens have come in steadily, affording the compiler ample opportunity to familiarize himself with the collection and to become qualified to present this catalog.

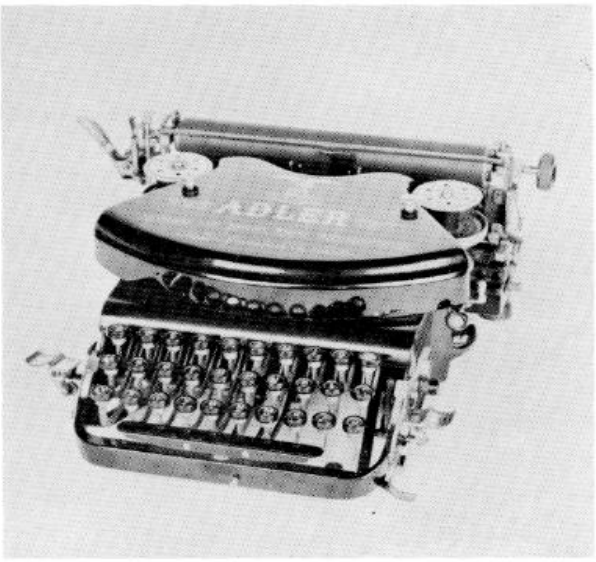
ELDON G. WOLFF
Curator of History

SHOLES MACHINE SHOP, MILWAUKEE

MILWAUKEE
PUBLIC MUSEUM
DIORAMA



CHRISTOPHER LATHAM SHOLES



ADLER (German)

Cat. 42134, Neg. 416104.

Produced in 1898, this was the European product made under the patents of Wellington Kidder, Boston, Mass., and was practically a duplicate of the American WELLINGTON and the Canadian EMPIRE. It employed the forward-thrust principle of type-bar also found in the FORD. The ADLER was one of the popular machines in Germany and many derivations from the mother machine have been designed to include adding and calculating devices, an ADLER bookkeeping machine, besides the KLEIN-ADLER PORTABLE.

ALEXANDER (a)

Cat. 47365, Neg. 423405.

A four-bank, single-shift, front-stroke, visible machine, somewhat smaller than the usual office type, invented in 1914 by Jesse Alexander, Jackson County, Mo. Various attempts to organize a company finally found the Alexander Typewriter Co. established in March, 1914, with a factory in Brooklyn, N. Y., where a few of these machines were produced.

A different machine also named ALEXANDER is described below.

ALEXANDER (b)

Cat. 42060, Neg. 416087.

Produced in 1923, this is said to be the only typewriter originating on the west coast. It was produced in Los Angeles, Calif. The only information obtainable so far is that about thirty machines were completed when production was discontinued.

ALLEN

Cat. 41742, Neg. 415912.

Produced in 1919, this machine was composed of only 630 parts. It was the most simple, durable, and positive of the writing machines invented by Richard W. Uhlig, Arlington, N. J., who had already produced the COMMERCIAL VISIBLE in 1898, the EMERSON in 1907, the ARLINGTON in 1914, and the ATLAS in 1915. Although structurally sound, it had the disadvantage of being a three-bank, double-shift machine, whereas the four-bank, single-shift variety was rapidly gaining favor, and this circumstance was undoubtedly the cause of its failure to become a commercial success. The ALLEN took its name from Allentown, Pa., the home of James K. Bowen, who was financially interested in the project and became the president of the Allen Typewriter Co.

ALLEN (4-Bank)

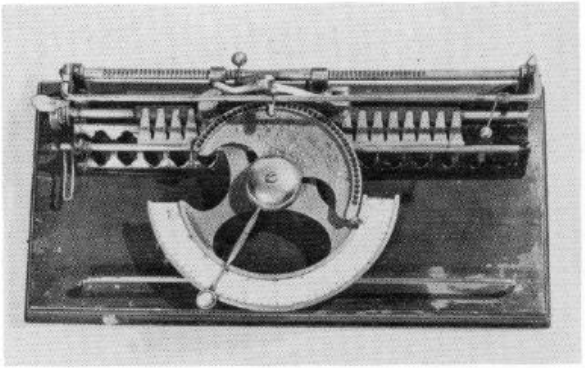
Cat. 47364, Neg. 423406.

This model of the four-bank ALLEN is without a doubt the only one in existence. Mr. Carl P. Dietz, the donor, visited Allentown, Pa., in August, 1939, in search of material, and found in the shop of W. J. Heffernan and Russ Parry the entire unassembled parts of the four-bank ALLEN in a cardboard carton. This machine was assembled in the Milwaukee Public Museum.

AMERICAN (a)

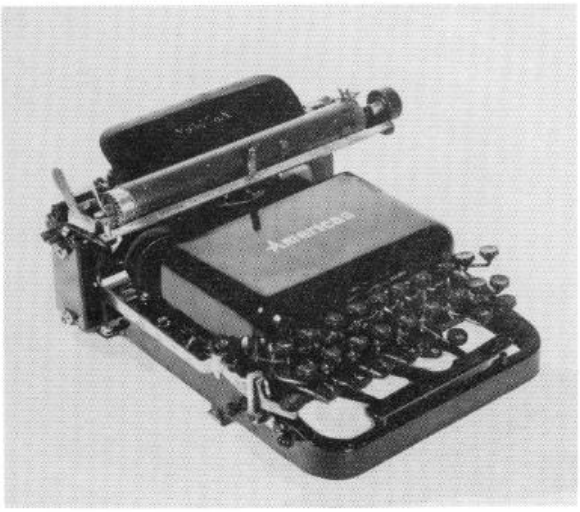
Cat. 52352, Neg. 427281.

(Globe)



Invented in 1893 by Halbert Edwin Payne, New York, N. Y. This indicator-type machine was manufactured by the American Typewriter Co., New York, N. Y., which later produced another AMERICAN, a type-bar machine. The "indicator" AMERICAN operated similarly to the PEOPLES, but instead of having a type-wheel, its type were cast on a rubber band of semicircular shape. After finding the proper letter with the indicator, which placed the letter in writing position, another lever was depressed to force the desired type forward against the paper and make the impression. Inking was accomplished by means of two inked felt rollers, one on either side of the machine, which rolled against the type-band.

The first machines were made in the Williams factory in Derby, Conn., but later the American Typewriter Co. established its own factory in Bridgeport, Conn., where this and later type-bar machines were produced.



AMERICAN (b)

Cat. 41688, Neg. 415887.

This machine was first made in the Williams factory at Derby, Conn., in 1899, as an experiment; in 1901 active production was begun, and in 1908 the company occupied its own plant at Bridgeport, Conn., where the last model, No. 8, made its appearance. It was also sold under the name of PULLMAN and MERCANTILE in America.

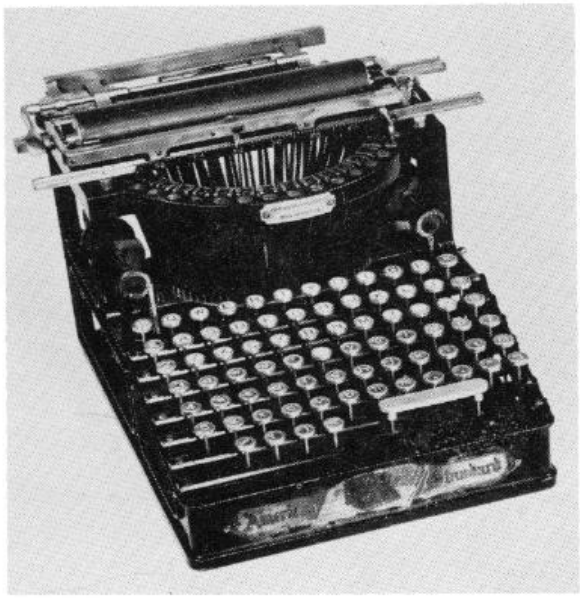
The AMERICAN was marketed in France under the name of HERALD; in Germany under the names of ELGIN, FAVORIT, and EUROPA; in England as the FLEET.

The American Typewriter Co. also manufactured at its Bridgeport factory a child's small typewriter. It was a flat machine employing rubber type.

AMERICAN POCKET TYPEWRITER

Cat. 46510, Neg. 420582.

A. M. Legett, of New York, N. Y., devised this little machine, which was to eclipse other portables in size and weight. The production stage was not reached, however, and Mr. N. P. Zech of Chicago, Ill., who was one of the principal backers of the enterprise, kindly furnished the model in our collection. Produced in 1926.



AMERICAN-STANDARD

Cat. 48672, Neg. 424618-A.

Produced in 1892, this was the name under which the JEWETT first appeared. The word STANDARD, however, having been used by the Remingtons for their REMINGTON - STANDARD, and legally protected, the use of this designation was relinquished and the name changed to JEWETT.

AMERICAN VISIBLE

Cat. 48847, Neg. 424848.

Produced in 1891 by the American Typewriter Co., New York, N. Y. This was a forerunner of the AMERICAN. Like the latter, it had a strip of rubber type which produced the writing. In 1893 it was discontinued in favor of the more practical AMERICAN (a).

ANNELL

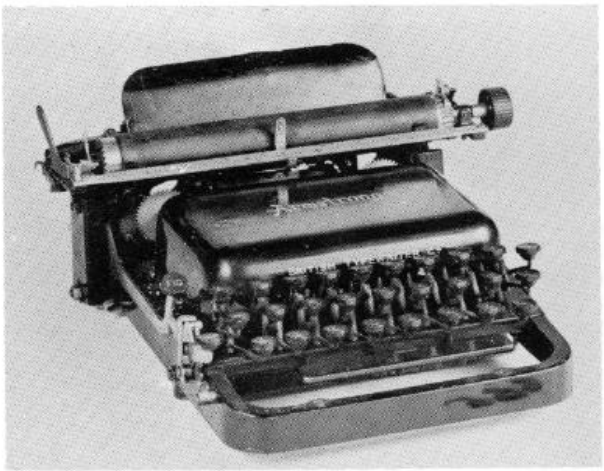
Cat. 40797, Neg. 415907.

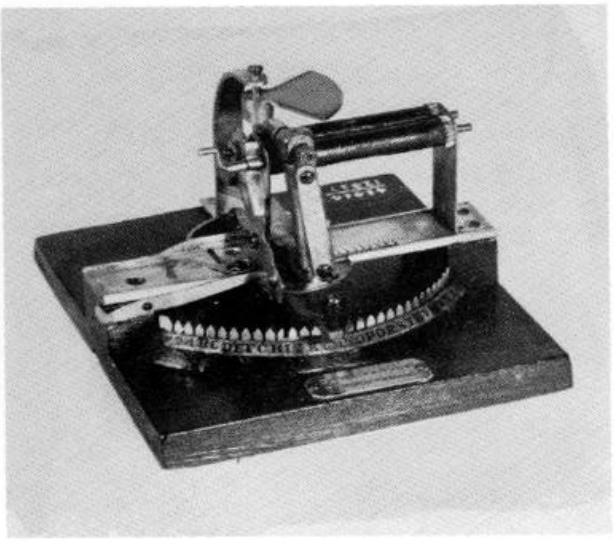
The 1914 model-4 WOODSTOCK was put out in 1922 under the name ANNELL for a mail-order campaign by the specially organized Annell Typewriter Co., Chicago, Ill., an adventure, however, which did not prove a success.

ARMSTRONG (British)

Cat. 41687, Neg. 423408.

Produced in 1907 by the British Typewriter Co. of Abington, England. It was similar to the AMERICAN (a), previously produced in the United States.





ARNOLD

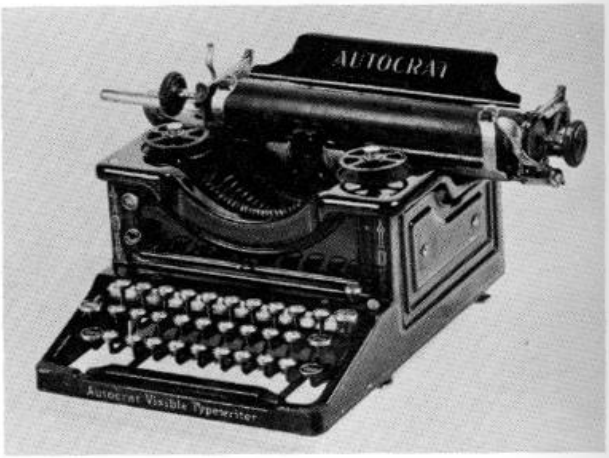
Cat. 42064, Neg. 416906.

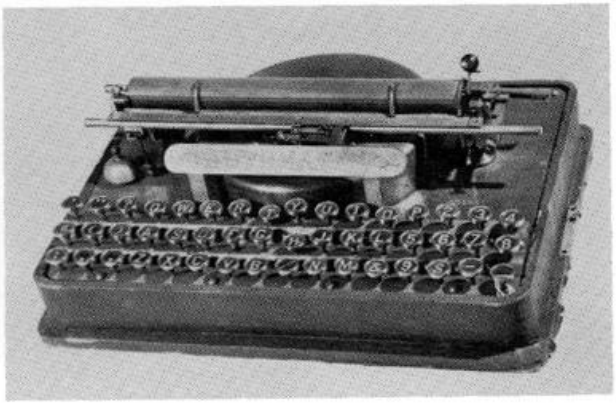
Patent model produced in 1876.

AUTOCRAT

Cat. 42263, Neg. 416110-B.

Produced in 1916 in the factory of the Rex Typewriter Co., Fond du Lac, Wisconsin, it was practically the same machine as the REX and HARRIS produced by this same company.





AUTOMATIC

Cat. H-2358, Neg. 416268.

Invented and produced in 1881 by Major E. M. Hamilton of Brooklyn, N. Y. A small, light machine with understroke type-bars similar to the SHOLES AND GLIDDEN and REMINGTON. This probably represents the first attempt to produce a portable typewriter. It was also sold under the name of HAMILTON. It was commercially manufactured for a few years, discontinuing in 1883.

BAR-LOCK

Cat. 41634, Neg. 416015.

Invented in 1881 by Charles Spiro, a New York watchmaker who had previously invented the COLUMBIA. Construction was similar to the HORTON but with the type-stroke downward. Originally produced as a double-keyboard machine under the name of BAR-LOCK; later as COLUMBIA-BAR-LOCK; and still later, with single keyboard and shift-key, as COLUMBIA. Manufactured by the Columbia Typewriter Mfg. Co., New York, N. Y.

BAR-LOCK (English)

Cat. 43082, Neg. 416121.

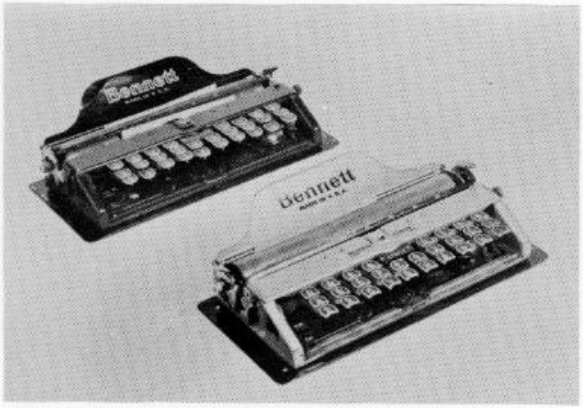
This is the successor of the BAR-LOCK, which was also made in England as the ROYAL BAR-LOCK.

It was produced in 1921 and was an entirely different machine from its predecessors, being a standard four-bank, front-stroke, single-shift machine constructed by Herbert Etherige for the Bar-Lock Typewriter Co., Nottingham, England. It had a large sale in England, Canada, and other English dominions.

BARR

Cat. 42258, Neg. 416112.

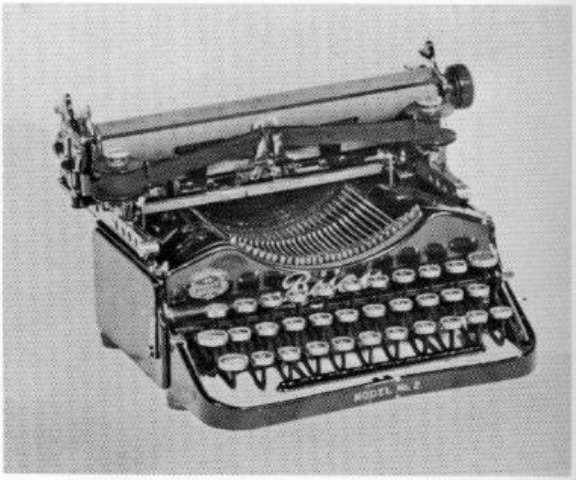
Invented in 1926 by John H. Barr, it was light and semi-portable, yet designed to do service as an office machine. It had a standard, four-bank, single-shift keyboard, and although of pleasing appearance, did not meet with great favor. The Barr-Morse Corporation of Ithaca, N. Y., produced this machine until 1934. The factory was then removed to Montreal, Canada, where the Barr-Morse Co., Ltd., took over control.



BENNETT

Cat. 40733, Neg. 415904.

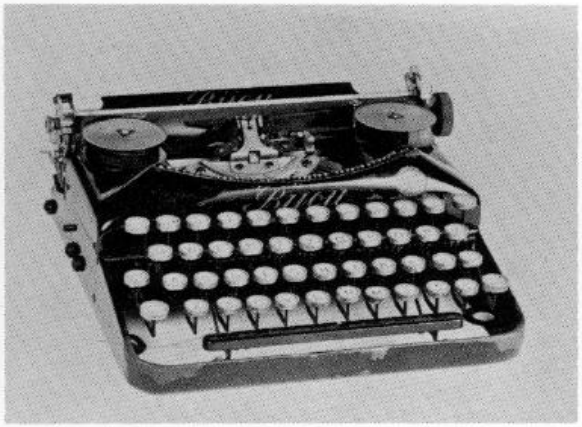
Invented in 1910 by Charles A. Bennett, Dover, N. J., this little pocket typewriter was a reissue of the JUNIOR. The inking in the BENNETT is accomplished by means of a ribbon, instead of by inkpad as employed on the JUNIOR. The same type-wheel served in both the JUNIOR and the BENNETT. It was produced by the Elliott-Fisher factory at Harrisburg, Pa., and placed on the market by the Bennett Typewriter Co., also of Harrisburg.



BIJOU (a, German)

Cat. 46731, Neg. 416132.

A German portable, three-bank, double-shift machine using the folding principle originated in the STANDARD FOLDING (original of the CORONA). Produced in 1910. Manufactured by Seidel & Nauman, Dresden, Germany.



BIJOU (b)

Cat. 43086, Neg. 423409.

Produced in 1928 by Seidel & Nauman, Dresden, Germany. It was a four-bank, single-shift portable machine. Also sold under the names GLORIA and ERIKA.

BING (German)

Cat. 42104, Neg. 416025.

Produced in 1925 by the Bingwerke, Nurnberg, Germany. This frail German portable deserved being made of more substantial material. It was unable to stand up under even moderate use. It was introduced in America with the No. 1 employing an inkpad and the No. 2 employing a ribbon.

It was also known as AMKA, BERNI, and BEKE.

BING No. 2

Cat. 45018, Neg. 418872.

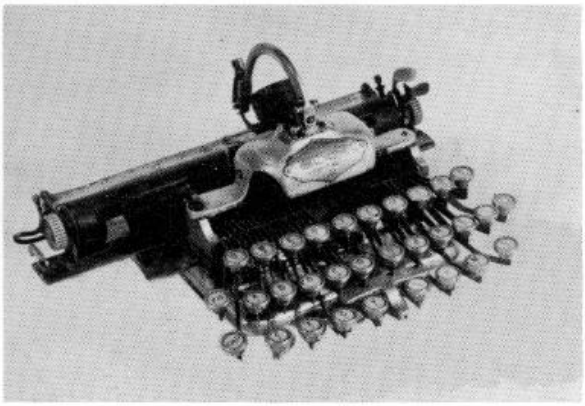
Produced in 1927 by the Bingwerke, Nurnberg, Germany. This model differed from the No. 1 model in that a ribbon was used instead of an inkpad.

BLICK-BAR

Cat. 47373, Neg. 423415.

Invented in 1916 by Emmet G. Latta, Syracuse, N. Y. It was first named MOYER, after Harry A. Moyer of Syracuse who had furnished the finances for its development. The Blickensderfer Mfg. Co., Stamford, Conn., which had produced the BLICKENSDERFER, used this machine for its entry into the field of front-stroke visible writing machines. It was a machine of simple construction with ball-bearings on type-bars and carriage, and showed every indication of becoming one of the successful machines when Geo. C. Blickensderfer died (1917) and the enterprise was thrown into discord.

Harry A. Smith acquired the remains, and at Elkhart, Indiana, produced the machine under his own name. Production of this machine soon ceased.



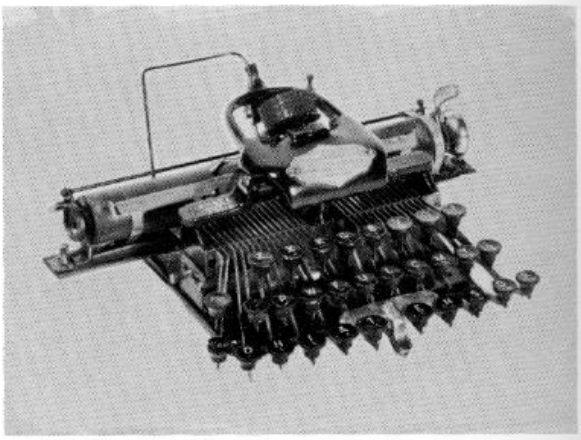
BLICK FEATHERWEIGHT

Cat. 40809, Neg. 415980.

Produced by the Blickensderfer Mfg. Co., Stamford, Conn. This was an aluminum model of the BLICKENSDERFER. It was made for sale in England.

BLICKENSDERFER

Cat. 41721, Neg. 415873.

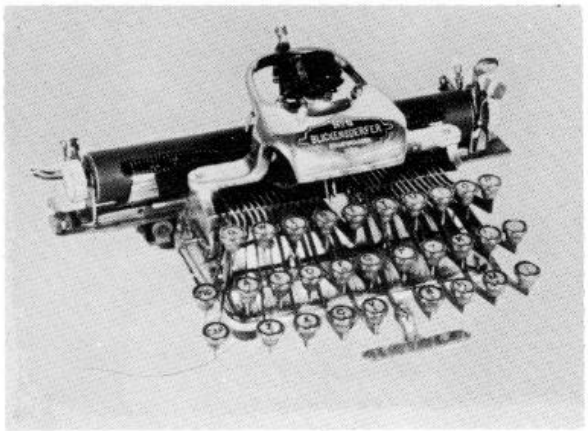


Produced in 1893, this portable wheel-type machine literally took the world by storm, being the first one of its type to embody the requirements of stability, speed, and portability. Hundreds of thousands were sold both in America and in the foreign market, and serviceable "Blicks" are still found everywhere. The inventor was G. E. Blickensderfer, Erie, Pa.; the producer, the Blickensderfer Mfg. Co., Stamford, Conn.

Similar in operation to the sleeve-wheel in the CRANDALL, the type-wheel of the "Blick" moved to three levels to reach the required letter-line, then revolved to place the letter in position, and struck downward on the platen to make the impression. This impression was powerful enough to make several carbon copies. The mechanics employed were the marvel of the hundreds of writing-machine types, and the machine justly deserved the tremendous sale it enjoyed.

Production by the Blickensderfer Mfg. Co. ceased in 1917. However, in 1928 Remington-Rand, Inc., again placed the machine on the market under the name of REM-BLICK, but without much success, the portable type-bar machines having superseded in demand those of the wheel-type.

In 1916 the Blickensderfer Mfg. Co. produced a type-bar machine under the name of BLICK-BAR.



BLICKENSDERFER No. 6

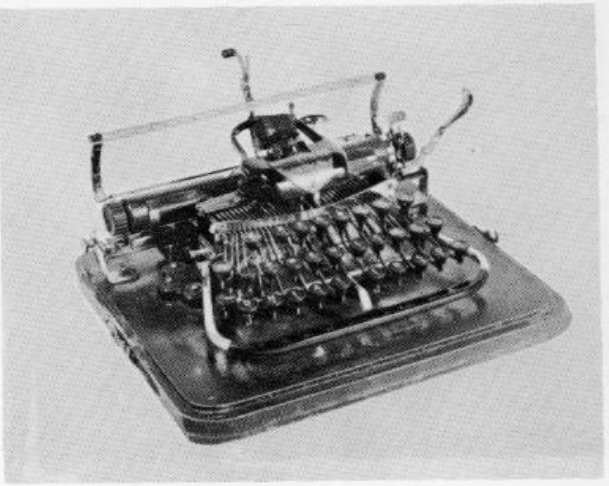
Cat. 42051, Neg. 416085.

Produced in 1896 by the Blickensderfer Mfg. Co., Stamford, Conn.

BLICKENSDERFER No. 7

Cat. 41019, Neg. 415976.

Produced in 1897 by the Blickensderfer Mfg. Co., Stamford, Conn. This machine was fastened to a wood base and was made with a spacer-bar, tabulator and card holder.



BLICKENSDERFER No. 8 (a)

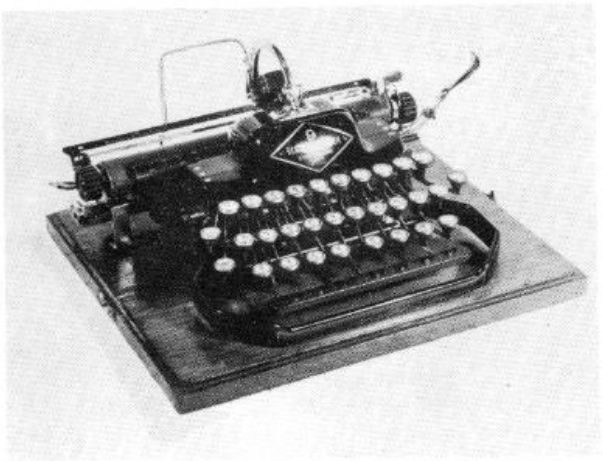
Cat. 40661, Neg. 415977.

Produced in 1907 by the Blickensderfer Mfg. Co., Stamford, Conn. This machine had a long platen and was large and more substantially built.

BLICKENSDERFER No. 8 (b)

Cat. 41391, Neg. 415978.

Produced in 1907 by the Blickensderfer Mfg. Co., Stamford, Conn. This machine was built with a short platen.



BLICKENSDERFER No. 9

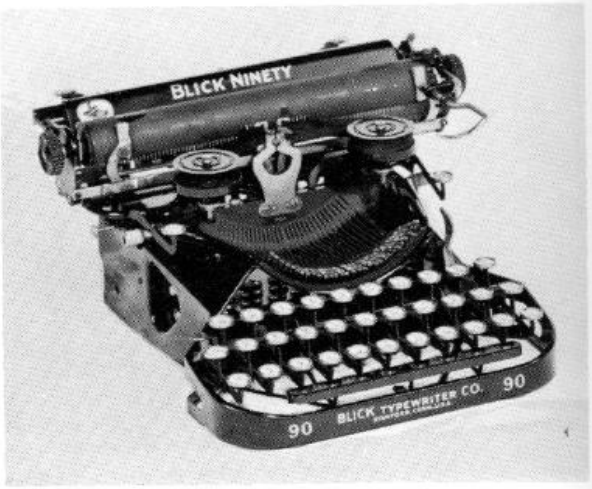
Cat. 41722, Neg. 415979.

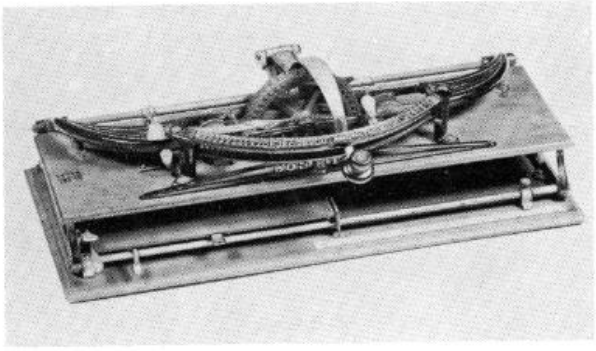
Produced in 1917 by the Blickensderfer Mfg. Co., Stamford, Conn. Production ceased in 1918. In 1928 the Remington Mfg. Co. produced and sold this machine under the name REM-BLICK.

BLICK-NINETY

Cat. 43079, Neg. 416134.

A three-bank, double-shift machine produced in 1919. It was out of line with progress and was rapidly being replaced by a four-bank, single-shift variety of keyboard. After the death in 1921 of its inventor, Lyman R. Roberts, its name was changed to ROBERTS-NINETY. Manufactured by the Blick Typewriter Co., Stamford, Conn. With the change of the name, in 1922, the Roberts Typewriter Co. succeeded to the business, discontinuing production in 1924.





BOSTON

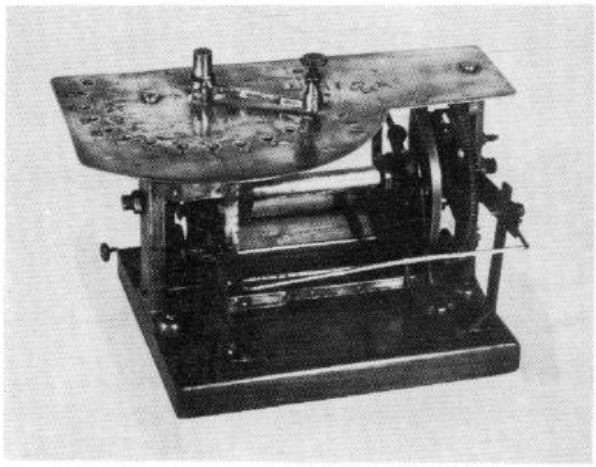
Cat. 44798, Neg. 421390.

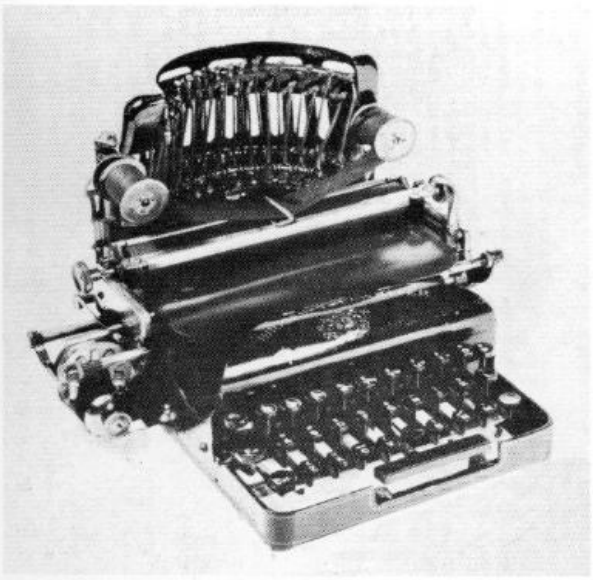
Produced in 1888 by the Boston Typewriter Co., Boston, Mass. This was the most substantial of the indicator machines. Instead of the types being cast in rubber, the BOSTON had a metal type-wheel of sufficient size to stand up under fairly hard usage. The inventor was John Becker.

BRADY-WARNER

Cat. 42065, Neg. 416095.

Patent model produced in 1878.





BROOKS

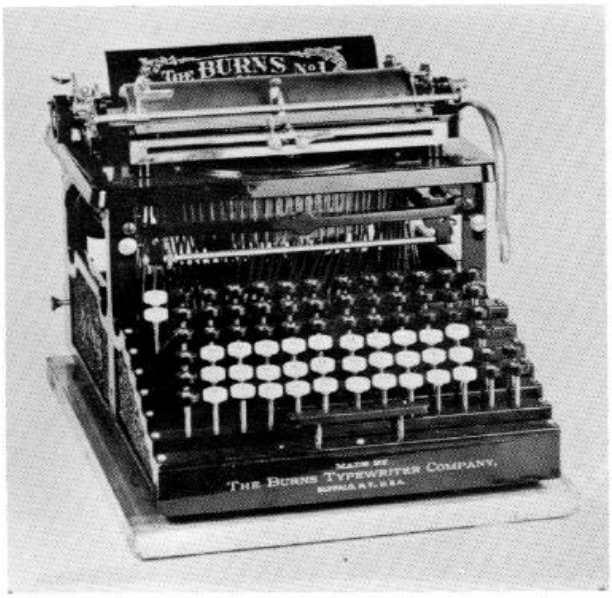
Cat. 41635, Neg. 415858.

Invented in 1887 by Byron A. Brooks. Manufactured by the United Typewriter & Supplies Co., New York, N. Y. Its type-bars struck downwards, but towards the operator. Brooks was also the inventor of the idea of having an upper and lower case type on one bar, which made possible the shift-key idea first used in the REMINGTON No. 2. The BROOKS was distinguished for its simplicity, consisting of only 550 parts.

BURNETT

Cat. 40790, Neg. 415967.

Produced in 1908, in Chicago, Ill. From all information available it was produced in the attempt to resurrect the ill-fated IMPERIAL VISIBLE and TRIUMPH VISIBLE. Some changes were made in structure and housing, but the principal feature of oblique position of the type-bars was retained.



BURNS

Cat. 47371, Neg. 423418.

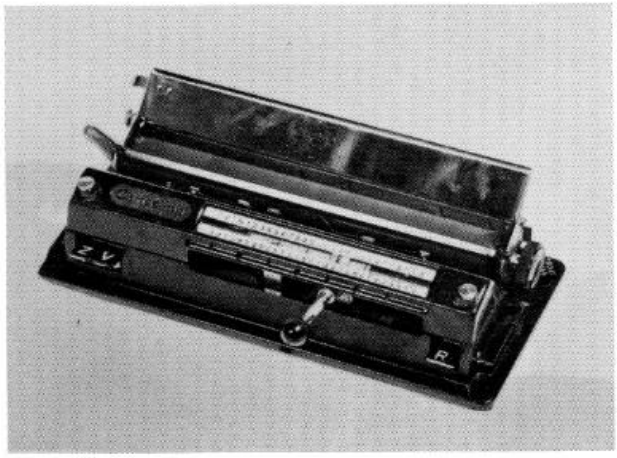
In 1888 Frank Burns of Westfield, N. Y., began working on a typewriter which used a rubber strip with rubber type vulcanized on its face. He soon realized that this idea was impractical and was induced to move to Buffalo to develop new ideas which resulted in the double-keyboard BURNS typewriter. It is said to have been the first machine with variable line spacer, back spacer, and marginal stops which permitted writing on either side of the margin. The platen was instantly removable for the substitution of hard or soft platens. The Burns Typewriter Co. was organized in 1890 by Mr. Burns, C. Lee Abell, and Wm. McNivan. George M. Howe became superintendent. The panic of 1893 stagnated business investments and the company, lacking needed capital, laid aside the further development of its typewriter, but continued its business of making steel type for many of the other more successful typewriters.

CALIGRAPH, No. 1

Cat. 34626, Neg. 415853.

The first commercial type-bar machine, equipped with a key for each character printed, to be placed on the market. In 1880 George Washington Yost, who had been identified with E. Remington & Sons, organized the Caligraph Patent Co., and in cooperation with Franz Xavier Wagner, who later produced the UNDERWOOD, devised the CALIGRAPH typewriter. It was placed on the market in 1880. The No. 1 CALIGRAPH printed only upper case letters. Manufactured by the American Writing Machine Co. of New York, N. Y. Yost later produced the YOST typewriter.

Models No. 2 (Cat. 6944, Neg. 416050) and No. 3 (Cat. 41658, Neg. 416054) were produced in 1882 and 1883, respectively.



CARISSIMA (German)

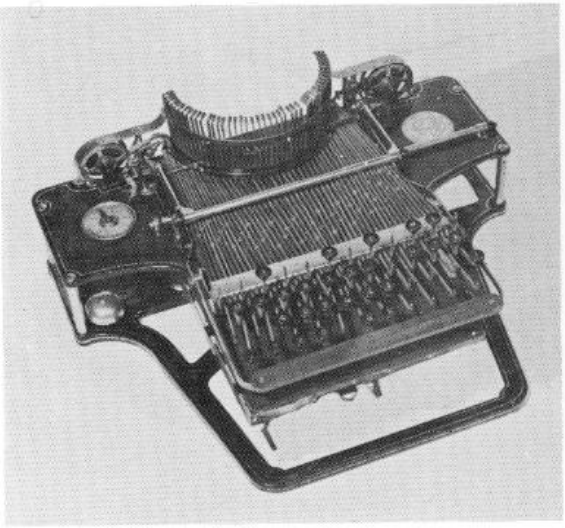
Cat. 44224, Neg. 421071.

Produced in 1934 by Knaur Hubel & Denk, Leipzig, Germany, this little indicator machine should have "gone places" to judge from the style of its makeup; its modern bakelite housing and other new features made it attractive to the eye. Unfortunately for its inventor and producers, it belonged to a class of typewriters which had seen their day. It used a type-wheel, was about the size of the BENNETT and JUNIOR, but was much lighter in weight than these and therefore more easily carried in an overcoat pocket. A neat job, but born too late to offer competition to the modern front-stroke portables.

CASH

Cat. 47963, Neg. 423956.

Invented in 1887 by Arthur Wise Cash, Hartford, Conn. A typewriter employing a downward stroke of the type bars, similar to the BAR-LOCK save that instead of having a round platen, the type struck on a flat bed, as in later book-writing machines. Also sold to a limited extent as the TYPOGRAPH.



CENTURY

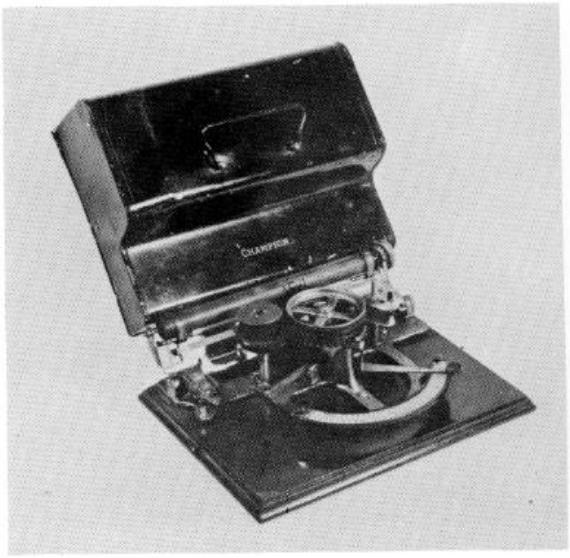
Cat. 41016, Neg. 415906.

This machine was almost identical to the REMINGTON-JUNIOR in size and type-bar mechanism. The CENTURY frame was rounded and there was a different ribbon device. It was invented in 1914 by Frank Sholes, one of the sons of Christopher Latham Sholes, and was manufactured by the American Writing Machine Co., New York, N. Y.

CHAMPION

Cat. 41766, Neg. 415995.

Manufactured in 1898 by the Garvin Machine Co., New York, N. Y. This machine was originally marketed under the name PEOPLES (1893). The inking device was a revolving felt pad. In 1898 a ribbon for inking was substituted for the pad and the name was changed to CHAMPION. This machine was also sold under the name PEARL.



CHICAGO

Cat. 44698, Neg. 419773.

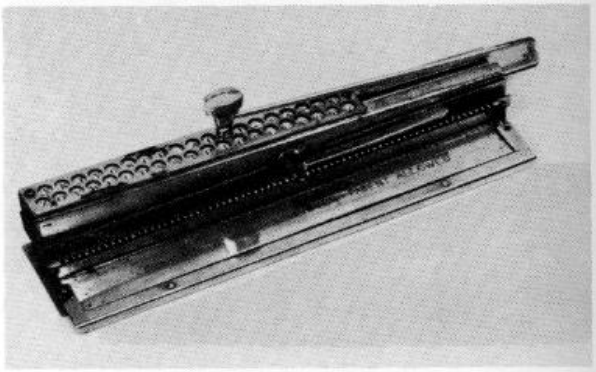
This machine was a further development of the MUNSON. By an ingenious arrangement, the elongated type-wheel moved from side to side horizontally instead of vertically, as in the CRANDALL, BLICKENSDERFER, and others. The CHICAGO was capable of a fair degree of work and enjoyed moderate success for a few years, but was unable to measure up to the superior type-bar machines. It was also marketed under the names of CONOVER, DRAPER, and BALTIMORE. Manufactured by the Chicago Writing Machine Co., Chicago, Ill., from 1898 until 1912, when the factory was moved to Galesburg, Ill., and the name of the company changed to Galesburg Writing Machine Co., where, under the name of GALESBURG, it expired.

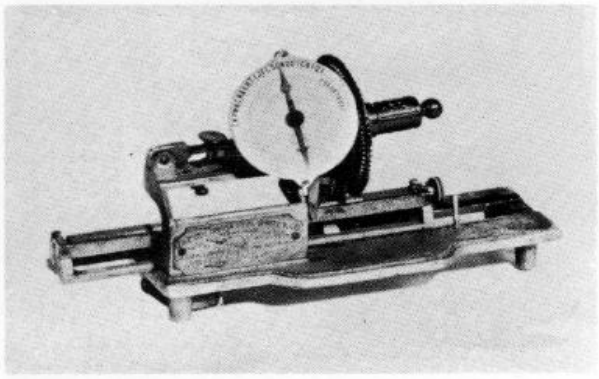
Model No. 3 (Cat. 42050, Neg. 416083) was produced in 1903.

COFFMAN (Pocket)

Cat. 50931, Neg. 425396.

Invented and produced in 1903 by Dr. G. W. Coffman of St. Louis, Mo. This was an indicator-type machine which could be carried in the pocket. Type was mounted on an endless rubber belt. Upper and lower case type and numbers were used.





COLUMBIA

Cat. 43077, Neg. 180102.

A wheel-type machine, invented in 1883 by Charles Spiro, a watchmaker of New York, who later invented the BAR-LOCK and VISIGRAPH and was co-inventor of the GOURLAND. Manufactured by Columbia Typewriter Mfg. Co., New York, N. Y.

COLUMBIA-BAR-LOCK
No. 10

Cat. 40690, Neg. 416016.

Invented by Charles Spiro, a New York watchmaker. Produced in 1900 by the Columbia Typewriter Mfg. Co., New York, N. Y.

COLUMBIA-BAR-LOCK
No. 14

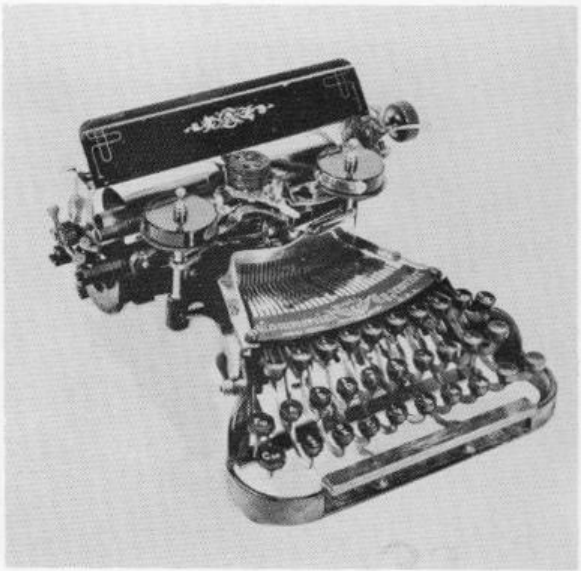
Cat. 41671, Neg. 419780.

Invented by Charles Spiro. Produced in 1910 by the Columbia Typewriter Mfg. Co., New York, N. Y. This model was sold in England under the name ROYAL-BAR-LOCK.

COMMERCIAL VISIBLE

Cat. 41727, Neg. 415883.

Invented in 1898 by R. W. Uhlig, this wheel-type machine was manufactured by the Visible Typewriter Co., New York, N. Y., and later by the Commercial Visible Typewriter Co. of the same city. Originally it was sold under the name of FOUNTAIN. While it resembled the POSTAL in appearance, its mechanism was entirely different. It had a limited sale.



CONOVER

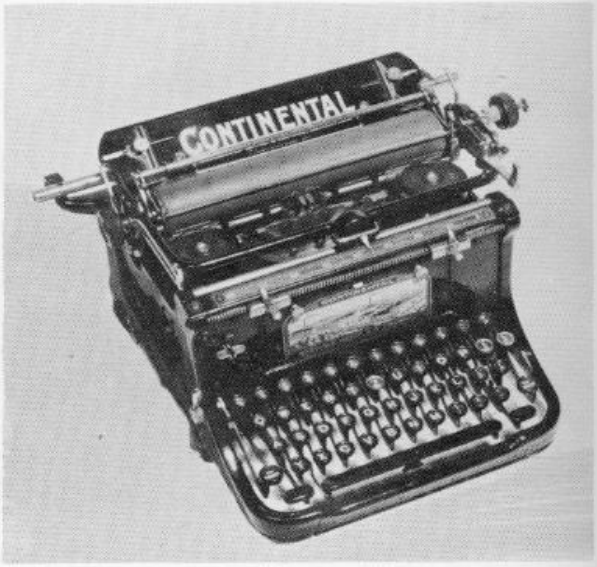
Cat. 41765, Neg. 415963.

Produced in 1900 by the Lowar Spencer Bartlett & Co., Chicago, Ill. It was also sold under the names of MUNSON, DRAPER, and BALTIMORE.

CONTINENTAL (German)

Cat. 43091, Neg. 423963.

A machine made in 1914 by the Wanderer Typewriter Co., Schoenau-Chemnitz, Germany, which succeeded the Winklhofer & Faenicke Corporation. The latter was established in 1885 to manufacture bicycles. In 1904 it extended its activities to include typewriters. The basic principles of the CONTINENTAL typewriter have remained intact through the years, although various models have appeared with such adjuncts as tabulating devices, stencil-cutting, paper-roll feed, accounting, electric carriage control, and other attachments which have made the machine applicable to the demands of modern business and accounting offices.



CONTINENTAL SILENTA (German)

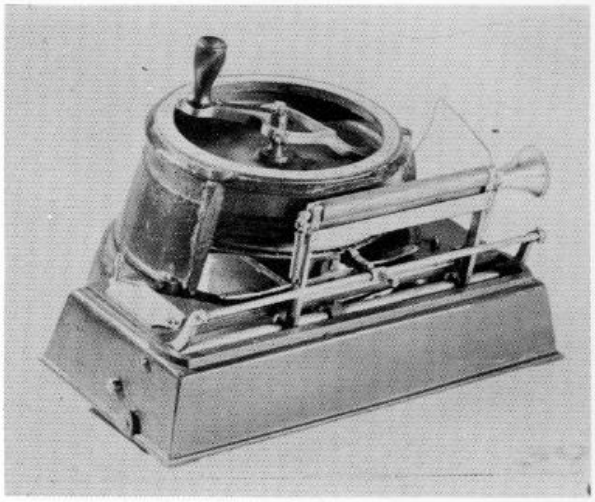
Cat. H-2422, Neg. 204154b.

A noiseless machine produced in 1934 by Wanderer-Werke, Siegmár-Schonau, Germany. It consisted of 4000 parts.

COOPER, John H.

Cat. 47380, Neg. 423124a.

Produced in 1856 by the inventor John H. Cooper. Like the JONES TYPOGRAPHER and other early attempts in constructing writing machines, the COOPER used a revolving disc which carried the desired type to its striking position. One of the features was its rotatable cylindrical platen with rolls for feeding the paper. This was said to be the first such combination of platen feeding rolls. It also employed a rachet and dog mechanism with a pair of pulleys for moving the platen step by step while writing, and also for preventing a backward movement.



CORONA

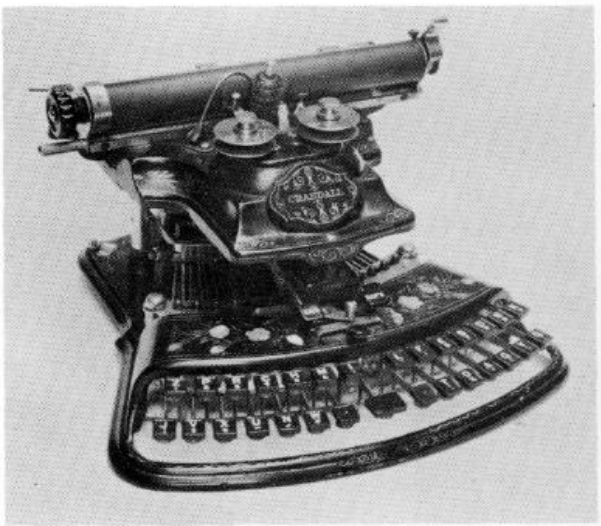
Cat. 46455, Neg. 422495.

Originally produced as the STANDARD FOLDING by the Rose Typewriter Co., New York, until 1909, when the name was changed to Standard Typewriter Co. Soon thereafter the plant was moved to Groton, N. Y. In 1912 the name was changed to CORONA, and in 1914 the name of the company was again changed to Corona Typewriter Co., Inc.

CRANDALL

Cat. 41781, Neg. 419769.

Invented in 1879 by Lucien Stephen Crandall and manufactured by the Crandall Machine Co., Groton, N. Y. This was the earliest of the type-wheel machines. C. Latham Sholes and James Densmore, respectively inventor and promoter of the original REMINGTON typewriter, are said to have been interested in the production of the CRANDALL.



CRANDALL No. 3

Cat. 46511, Neg 420585.

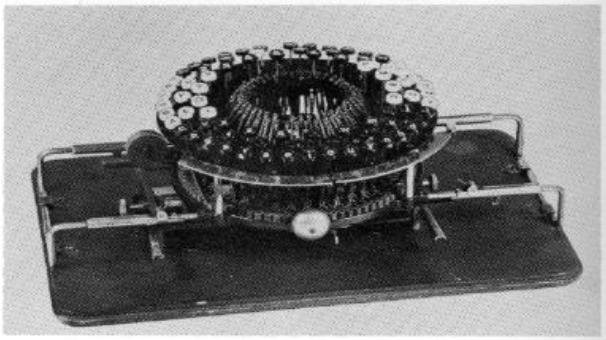
An improved model produced in 1906 by the Crandall Machine Co., Groton, N. Y.

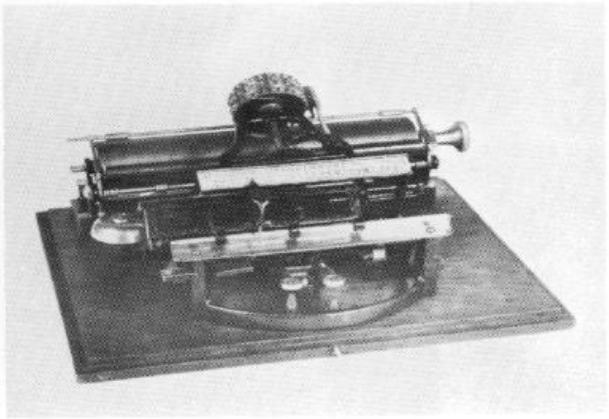
Model No. 4 (Cat. 41081, Neg. 421177) was produced in 1906.

CRARY

Cat. 46307, Neg. 420473.

Invented in 1894 by J. M. Crary, Jersey City, N. J. In this machine the type-bars were arranged in circular fashion but struck downwards instead of upwards. The keys also comprised a circle. It was not a practical machine in comparison to others already on the market and found little favor.





CROWN

Cat. 46180, Neg. 421942.

Produced in 1894, it was the second CROWN typewriter designed by Byron A. Brooks. It had three rows of type on a type-wheel, which was revolved by moving a letter-finding lever over the letter table. By depressing another lever the type-wheel was brought to strike downwards on the platen. Manufactured by the National Meter Company, New York, N. Y.

CROWN PORTABLE

Cat. 41743, Neg. 415924.

This machine was manufactured for the mail-order trade of John M. Smyth Co., Chicago, Ill., evidently by the National Typewriter Co., Fond du Lac, Wis. First manufactured in 1911.

DAUGHERTY

Cat. 44043, Neg. 415863.

Invented in 1890 by James Daugherty, a stenographer of Kittanning, Pa., the DAUGHERTY was the first entirely visible front-stroke writing machine, the forerunner of all the modern front-stroke typewriters. It was produced first in the CRANDALL factory in Groton, N. Y.; later by the Daugherty Typewriter Co., Kittanning, Pa. In 1898 the factory was moved to Pittsburgh, Pa., and the name changed to PITTSBURG; later to RELIANCE, RELIANCE-PREMIER, FORT PITT, and finally SCHILLING.

DAYTON

Cat. 42259, Neg. 416113.

Produced in 1924 by the Dayton Portable Typewriter Co., Dayton, Ohio. It was a portable, four-bank, single-shift, front-stroke machine requiring only 559 parts, including screws. Its advertised "modern system of intensified quantity production" failed to materialize and the machine disappeared from the market after a few months of existence. One of its principal faults was the inferior quality of the material used in its manufacture.

DECKER-BEACHLER

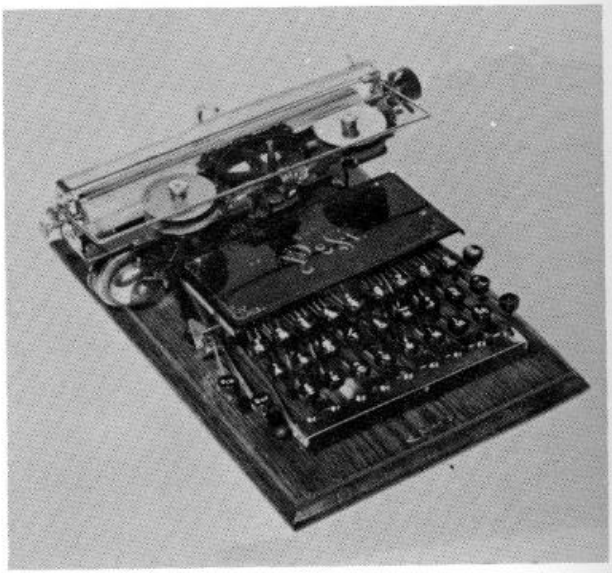
Cat. 48317, Neg. 424153.

Produced in 1917, this machine was the successor to the PITTSBURG. It was sold under the name RELIANCE, RELIANCE-PREMIER, and AMERICAN. Production ceased in 1921.

DEFI

Cat. 47969, Neg. 423962.

Employing a four-bank keyboard with two shifts, this machine wrote 84 characters. The type was cast on the outer surface of the segment of a truss wheel similar to that used on the HAMMOND and KEYSTONE. Of neat design, it was really a practical machine, but the low selling price was not sufficient to create a market. Manufactured by the Eagle Typewriter Co., 150 Nassau Street, New York, N. Y. It was also sold under the name EAGLE. Produced in 1908.



DEMOUNTABLE

Cat. 42133, Neg. 416107.

The outgrowth of the HARRIS, also known as REX. The Harris Typewriting Co. was organized in 1911, but the name was changed in 1914 to Rex Typewriter Co. The factory was located in Fond du Lac, Wis. The same company, after May, 1916, also manufactured the NATIONAL PORTABLE, producing models 2, 3, and 5. In 1918 the development of a four-bank, single-shift machine to replace the HARRIS and REX was undertaken and in 1921 the first machines were marketed under the name DEMOUNTABLE, so named because the carriage and type basket were easily removable for cleaning. In March, 1923, the name of the company was changed to Demountable Typewriter Co. In October, 1936, the company was reported to have sold its dies and patents to an Italian producer.

DENNIS DUPLEX

Cat. 46028, Neg. 420922.

Invented in 1892 by A. S. Dennis, Cleveland, Ohio, and manufactured by the Duplex Typewriter Co., Des Moines, Iowa. In this machine an attempt was made to write combinations of words by striking two keys at the same time, but the method proved unsuccessful.

DENSMORE No. 6

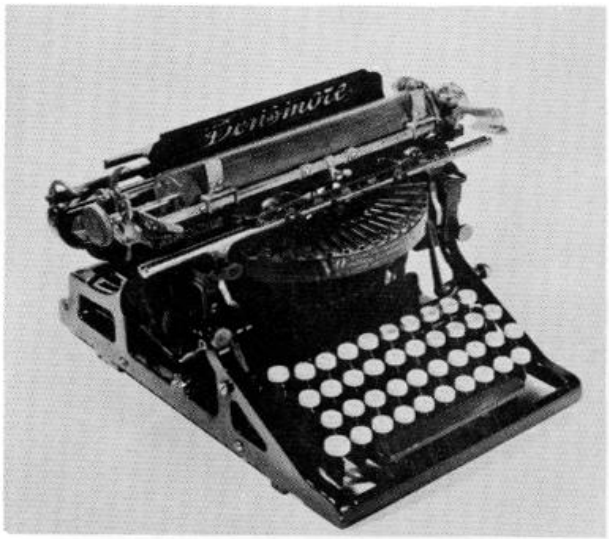
Cat. 46557, Neg. 420661.

Produced in 1907 by the Union Typewriter Co., Jersey City, N. J. A tabulator was added to the mechanism of this machine.

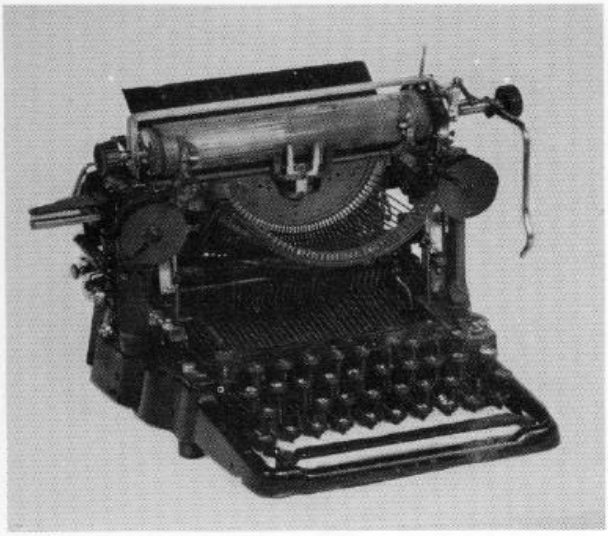
DENSMORE

Cat. 40645, Neg. 415867.

Conceived and manufactured by Amos Densmore of Meadville, Pa., with the assistance of his brother Emmet, under the firm name of Densmore and Densmore. Produced in 1891, it was the first typewriter to use ball bearings for its pivoted type-bars and also its carriage. It was also the first typewriter to use the platen release, which was later adopted on all modern typewriters. Using a type-bar which had been invented by Walter J. Barron, Amos Densmore introduced a number of innovations in design and construction which made the DENSMORE the lightest running machine of its time. Softness of touch and operation of keyboard and type-bars were outstanding. The carriage was easily removable, and instead of lifting the carriage to see the writing as in other machines, a slight shifting movement forward brought the writing into plain view.



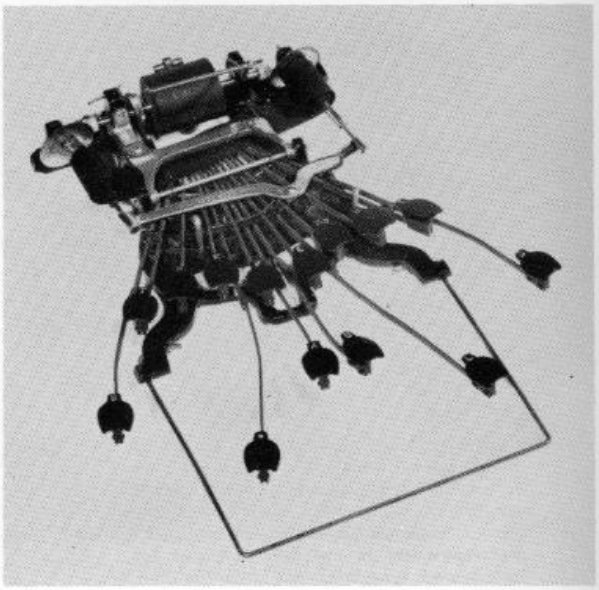
Densmore & Densmore had their machine manufactured at the plant of the Merritt Mfg. Co., Springfield, Mass., and sold the machine to the Densmore Typewriter Co., which had been organized by outside interests to act as a selling company, and in which Densmore & Densmore had no financial interest. Later the DENSMORE machine was taken into a trust company called the Union Typewriter Co., which took over the REMINGTON, NEW CENTURY (CALIGRAPH), SMITH-PREMIER, YOST, and MONARCH machines, Densmore & Densmore and the Densmore Typewriter Co. taking stock in the new company for their interests. Models No. 2 (Cat. 41014, Neg. 416004), No. 4 (Cat. 40997, Neg. 415999), and No. 5 (Cat. 40644, Neg. 416005) were produced in 1897, 1902, and 1907, respectively.



DIAMOND

Cat. 42306, Neg. 416120.

Constructed in 1923 by Fred Sholes. It never reached the market.



DICTATYPE

Cat. 50273, Neg. 425395.

A shorthand writing machine. Manufactured in 1888 by the Dictatype Shorthand Machine Co., Philadelphia, Pa.

DRAPER

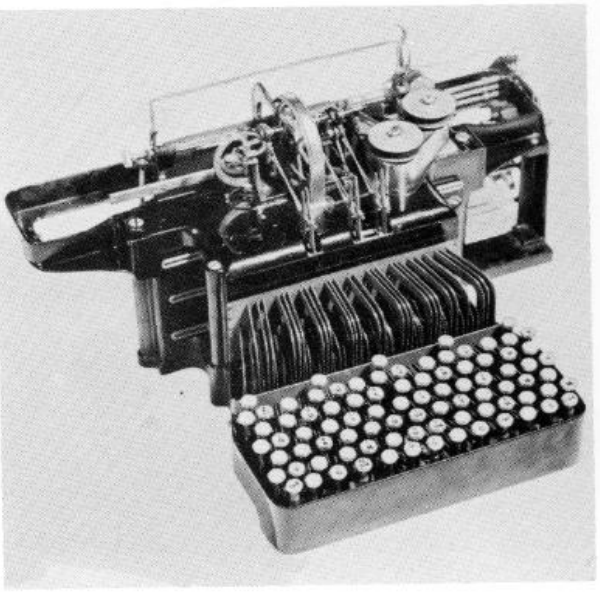
Cat. 41735, Neg. 419771.

An invention by Samuel John Seifried and James Eugene Munson of New York, N. Y. It was produced in 1900 by the Chicago Writing Machine Co., Chicago, Ill. It employed an elongated type-wheel which operated horizontally with a three-bank keyboard and double-shift. A hammer at the rear of the machine struck the paper against the type-wheel to make the impression. Also sold under the names CONOVER, BALTIMORE, and OHIO.

ECCLES

Cat. 45725, Neg. 418885.

Inventor and manufacturer unknown.



ECLIPSE (English)

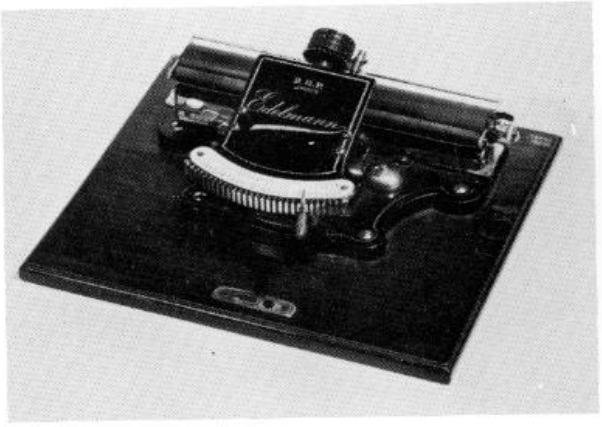
Cat. 47967, Neg. 423960.

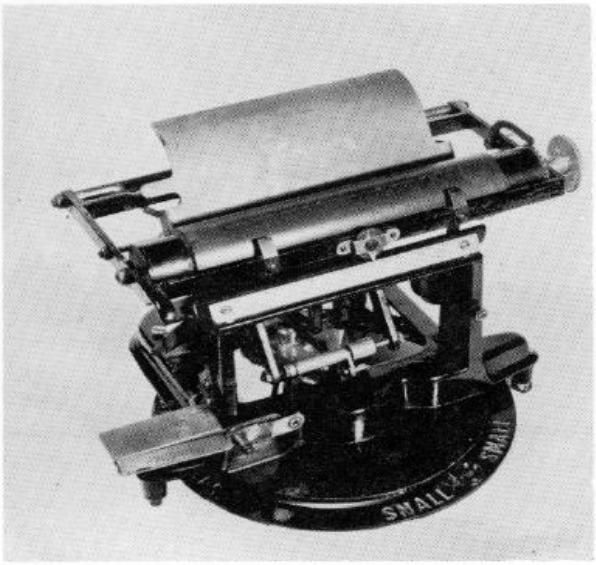
Similar to the BROOKS. Maker unknown.

EDELMANN (German)

Cat. 44221, Neg. 421073.

Produced in 1897, this was an indicator style of machine built on the principles of the American CROWN. It used a type-wheel almost identical to those of the BLICKENSDERFER and the CROWN. Like all indicator machines it was slow of operation, being designed for those who wrote an occasional letter. Use for commercial purposes was beyond its possibilities. It enjoyed a fair degree of success and continued to be manufactured until about 1907. Produced by Wernicke, Edelmann & Co., Berlin, Germany, and, after 1902, by Julius Pintsch Corporation, Frankfurt-am-Main, Germany.





EDISON-MIMEOGRAPH

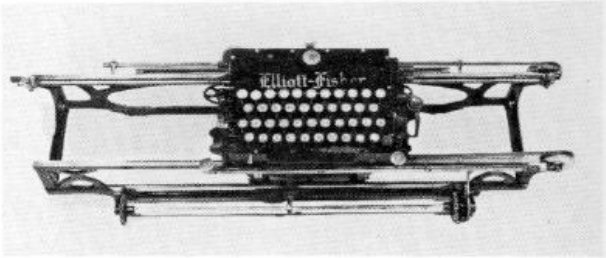
Cat. 41750, Neg. 415901.

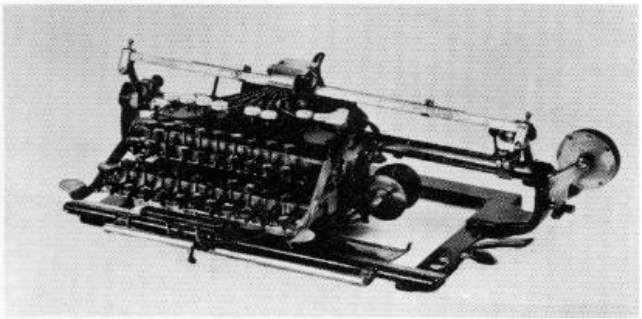
Invented in 1894 by Thomas A. Edison primarily for making mimeograph stencils, but offered to the public for general typewriting purposes. It was advertised as follows: "it lacks the highest speed, but is fast enough," an unusual statement for any advertiser. A revolving disc brought into writing position individual letters on a steel type. The depression of a lever threw a hammer upwards against the type, forcing it through a squared center guide against the plate to make an impression. Inking was effected by means of a ribbon. There were three models: No. 1 had 78 characters; No. 2, 86 characters; No. 3, 90 characters. Manufactured by the A. B. Dick Co., Chicago, Ill. In competition with many more practical machines already in the field, it survived only for a brief period.

ELLIOTT-FISHER

Cat. 42056, Neg. 416099.

Invented in 1894 by Robert Joseph Fisher, a bank cashier of Athens, Ga. Original manufacturer, Fisher Book Typewriter Co., Cleveland, Ohio. Designed principally for writing on flat surfaces, bound books, and the like, it was the first book-writing machine. In 1903 the Fisher Book Typewriter Co. united with the Elliott-Hatch Book Typewriter Co. under the name of Elliott-Fisher Co.





ELLIOTT-HATCH

Cat. 42257, Neg. 416111.

A book-writing machine invented in 1896 by Crawford Elliott, Chicago, Ill., and Walter Hatch, New York, N. Y. The type-bars were made to strike downwards on a flat, rubber-covered plate instead of a round platen. This machine was manufactured by the Elliott & Hatch Book Typewriter Co., New York, N. Y. In 1903 this company consolidated with the Fisher Book Typewriter Co., and the machine has since been produced under the name ELLIOTT-FISHER.

EMERSON

Cat. 40664, Neg. 415896.

Invented in 1907 by R. W. Uhlig, who had previously produced the COMMERCIAL VISIBLE (1898). First manufactured by the Emerson Typewriter Co., Kittery, Maine, and marketed from a Boston office. In 1908 the offices were removed to Chicago and a manufacturing plant established in Momence, Ill. In 1910 the business was purchased by Mr. Sears of Sears, Roebuck and Co., and later the factory was removed to Woodstock, Ill. A fair business was enjoyed for a number of years, but certain weaknesses in attaching the type to the type-bars, and also a limit in writing speed, caused trade to diminish until the EMERSON was withdrawn from the market.

EMPIRE (English)

Cat. 41767, Neg. 415958.

Invented in 1899 by Wellington Parker Kidder and produced by the Williams Mfg. Co., Montreal, Canada. The type action was of the forward thrust variety also used in the FORD and the RAPID. It was sold in England, France, Belgium, and Austria.

EMPIRE No. 2

Cat. 42055, Neg. 416081.

Produced in 1909. Sold in Germany under the name of DAVIS, and in the United States under the name of WANAMAKER.

ERIKA (German)

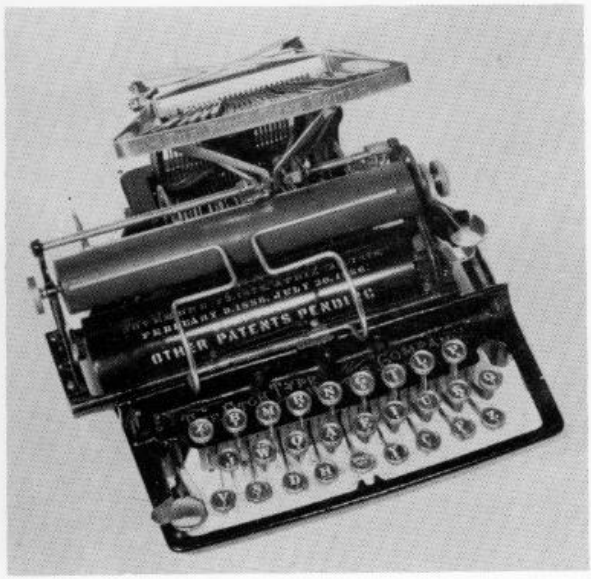
Cat. 41909, Neg. 416060.

Produced in 1910, a portable, three-bank, double-shift machine using the folding principle originated in the STANDARD FOLDING. Manufactured by Seidel & Naumann, Dresden, Germany. Since 1928 the ERIKA is produced as a four-bank, standard, single-shift portable. Also sold under the names of GLORIA, BIJOU, and BIJOU FOLDING PORTABLE.

FAY-SHOLES

Cat. 33188, Neg. 416034.

The REMINGTON SHOLES was sold in Europe under the name FAY-SHOLES.



FITCH

Cat. 47968, Neg. 423961.

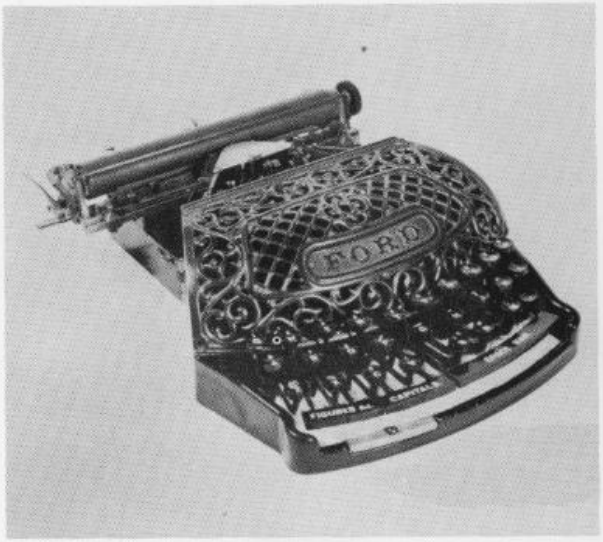
Invented by Eugene Fitch, Des Moines, Iowa, in 1886. In 1888 a production contract was made with the Brady Mfg. Co., Brooklyn, N. Y., and production started in 1891. It had a downward-stroke type-bar which produced visible writing. The types were of vulcanized rubber, a feature which resulted in the failure of this machine since they were too weak for practical purposes. The FITCH also sought to introduce a new keyboard arrangement, as follows:

X B M R N G T L P
J W O A E I U K Q
V S D H Y C F Z

FORD

Cat. 41672, Neg. 415880.

A forward-thrust machine, similar to the RAPID and the WELLINGTON. Manufactured in 1895 by the Ford Typewriter Co., New York, N. Y. Also produced in Germany under the name KNOCH, and in France as the HURTU. The FORD enjoyed only a limited sale.



FOX (blind)

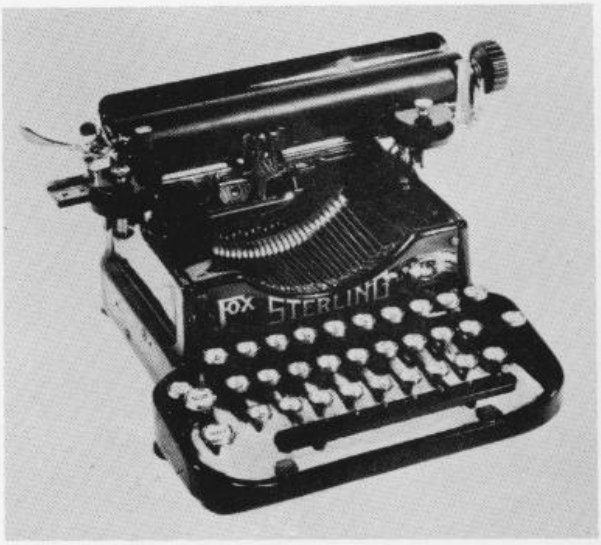
Cat. 41691, Neg. 416018.

Invented in 1902 by Wm. R. Fox and manufactured by the Fox Typewriter Co., Grand Rapids, Mich. An under-stroke, "blind" writing machine with an advantage over the early blind writers in that, instead of lifting up the carriage to see the work, a quarter turn thereof brought the work into view. The FOX had a standard four-bank, single-shift keyboard, and with the later visible model brought out by the company in 1906, bid fair to become a leader in the typewriter market. However, a folding model BABY-FOX brought the Fox Company into a legal tangle with the STANDARD-FOLDING or CORONA, which ended disastrously for the FOX, resulting in its demise in 1914.

FOX STERLING

Cat. 41027, Neg. 415918.

This machine was manufactured in 1921 and was the last product of the Fox Typewriter Co., Grand Rapids, Mich., which had also produced the FOX, the FOX VISIBLE, and the BABY FOX. It suffered the disadvantages of being a three-bank, double-shift machine, and failed to win a market.



FOX VISIBLE

Cat. 40657, Neg. 415893.

Produced in 1906, it was the successor of the FOX (blind), retaining the sturdy features of that machine. All the FOX products, including the FOX-STERLING and the BABY FOX, because of sound mechanical construction and pleasing design, deserved a permanent place among writing machines; however, the difficulties encountered because of legal entanglements were more than the producers could surmount, and in May, 1921, the Fox Typewriter Co. of Grand Rapids, Mich, succumbed to receivership. The FOX VISIBLE was also marketed under the name RAPID.

FOX (Baby Fox Portable)

Cat. 41886, Neg. 416019.

This was a folding portable produced in 1918 by the Fox Machine Co., Grand Rapids, Mich., which also produced the FOX in 1902, the FOX VISIBLE in 1906, and the FOX STERLING in 1920. The designer was Henry P. Nordmark. It was a three-bank, double-shift, front-stroke, visible writer. The folding feature was attacked by the CORONA interests and, after some litigation, the BABY FOX disappeared from the field.

FRANKLIN

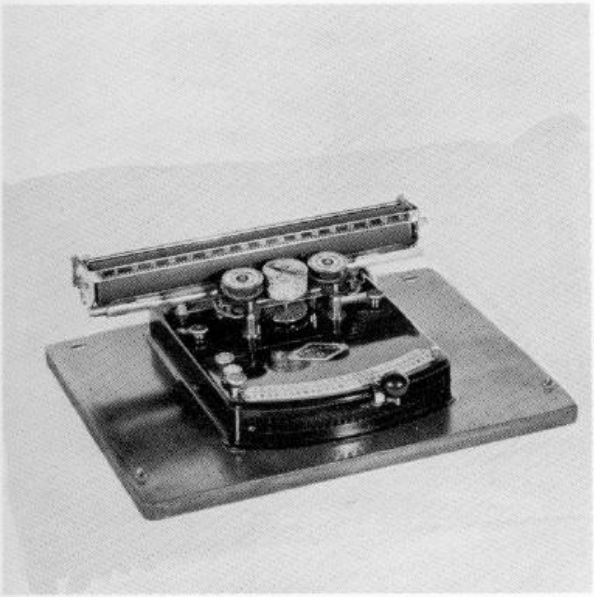
Cat. 41704, Neg. 416024.

Invented in 1887 by Wellington P. Kidder, who also invented the EMPIRE and WELLINGTON machines, and whose idea later resulted in the NOISELESS. It had a semi-circular keyboard and vertical type-bars that struck downward away from the operator, thus permitting visible writing. Manufactured by the Franklin Typewriter Co., New York, N. Y., which was later absorbed by the Victor Typewriter Company, New York, N. Y.

FRISTER & ROSSMANN

Cat. 44044, Neg. 420474.

Produced in 1892, this was a German copy of the American CALIGRAPH. It also used the "ideal" keyboard of the CALIGRAPH until 1899 when the "standard" double keyboard, like that of the SMITH-PREMIER, was substituted. The FRISTER & ROSSMANN, like its American prototype, enjoyed considerable popularity well into the 1900's, when it was displaced by the modern front-stroke, single-keyboard machines. Manufactured by Frister & Rossmann, Berlin, Germany. It was succeeded by the SENTA.



FROLIO (German)

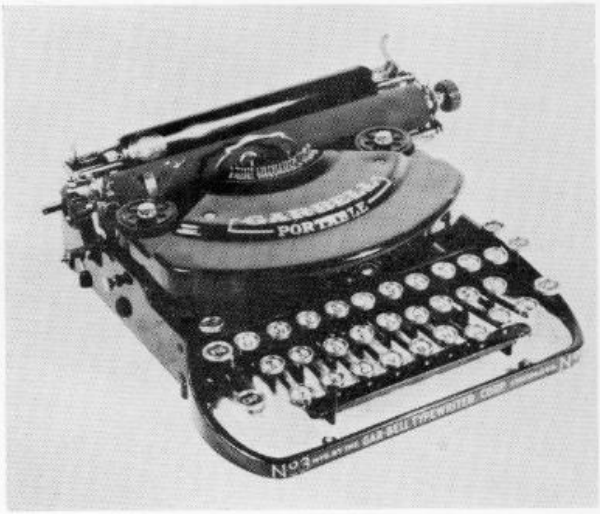
Cat. 41733, Neg. 416061.

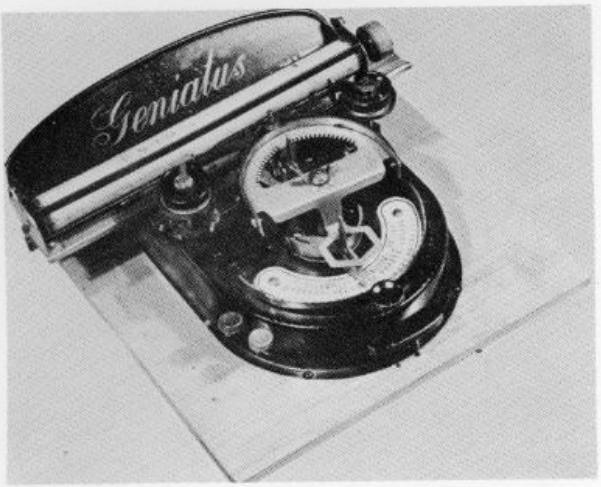
Invented in 1924 by Paul Muchajer. Produced by Gundka Works, Brandenburg, Germany. This was an indicator type machine which employed a type-wheel. Writing was accomplished by striking the type-wheel against the platen. Type-wheels were interchangeable. Also sold under the names G & K, GUNDKA, M-W, PERLITA, and WRITE EASY.

GARBELL

Cat. 41670, Neg. 415916.

Invented in 1919 by Max Garbell, Chicago, Ill., and produced by the Garbell Typewriter Co. of Chicago. It was a light, portable machine, using the forward-thrust type-bar mechanism similar to the WELLINGTON and FORD, but with a gear movement instead of springs. The metal parts were constructed of material too light and weak to give sustained service, and this, together with the fact that it had a three-bank, double-shift keyboard instead of the standard four-bank, contributed to its downfall. In July, 1923, financial difficulties ended with the appointment of a receiver.





GENIATUS (German)

Cat. 49967, Neg. 425200.

Produced in 1924, the GENIATUS presented some advanced features for the indicator style of typewriter. Where others used soft rubber type faces, this machine had the type cast on a band of vulcanized rubber, rendering it much more durable and able to make better type impressions. Its general features were obviously copied from the AMERICAN. From the standpoint of practicability it offered little to the science of mechanical writing. It was made in Germany principally for the mail-order trade.

GOURLAND

Cat. 41741, Neg. 415917.

A portable machine, designed and built in 1920 through the cooperation of M. J. Gourland, a Pittsburgh lawyer, and Chas. Spiro, inventor, by the Gourland Typewriter Corporation of New York, N. Y. It was designed to perform the service of the small portables as well as of the average office machine. Several thousands were made and sold, but in 1925 production was discontinued. It was said that Gourland had intentions of transferring production and operations to Russia, but nothing further was learned of this.

GRANVILLE AUTOMATIC

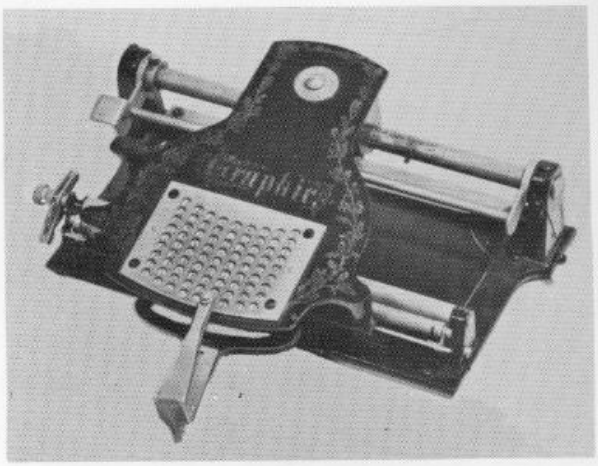
Cat. 46448, Neg. 423957.

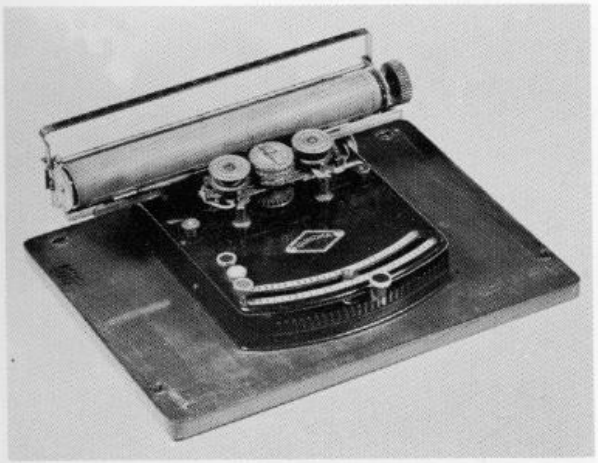
Invented in 1896 by Bernard Granville, Dayton, Ohio, who had produced the RAPID typewriter in 1890. The AUTOMATIC, like the RAPID, employed a forward-thrust type-bar and was produced by the Granville Mfg. Co., Providence, R. I., which was succeeded by the Mossberg & Granville Mfg. Co. of the same city. The machine did not meet with much success, and Granville later went to England where a syndicate was formed to produce it. However, the make soon disappeared from the market.

GRAPHIC (German)

Cat. 44227, Neg. 421074.

Produced in 1895, and adopting the movable rubber type-plate idea originally used by the HALL, the GRAPHIC found a limited sale in Germany. A second model appeared in 1897 with a few improvements, but not of sufficient merit to overcome the competition of the more practical machines. It even copied the keyboard and type arrangement of the HALL. It was manufactured by C. F. Kindermann & Co., Berlin, Germany.





GUNDKA (German)

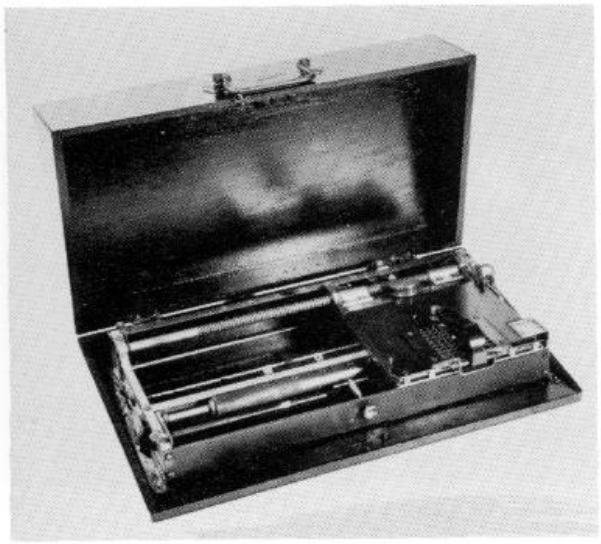
Cat. 44797, Neg. 421389.

Invented in 1924 by Paul Muchajer. Produced by Gundka Works, Brandenburg, Germany. This was an indicator type machine which employed a type-wheel. Writing was accomplished by striking the type-wheel against the platen. The type-wheels were interchangeable. Also sold under the names FROLIO, G & K, PERLITA, M-W, and WRITE EASY.

HALDA (Swedish)

Cat. 43087, Neg. 416125.

In its original form, this first Swedish typewriter resembled the American DENSMORE (1896). It was invented in 1914 by H. Hammarlund and was manufactured by A. B. Halda, Stockholm, Sweden. It was a standard four-bank, single-shift machine containing all the features required of a modern typewriter. Besides being the leading machine in its own country, it sold to a considerable extent in Austria.



HALL

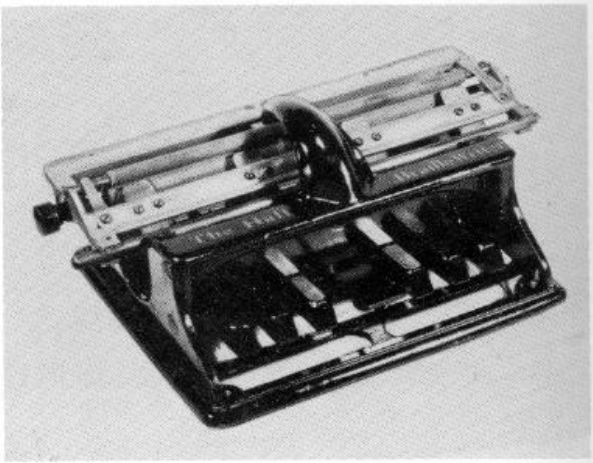
Cat. 40732, Neg. 415854.

Invented in 1880 by Thomas Hall, Brooklyn, N. Y. This was one of the outstanding freaks among early typewriters. Under the rectangular metal guideplate was a similarly shaped rubber plate equipped with rubber type. These normally rested against an ink pad and were pressed on the paper when a punch at the end of the movable bar was thrust by the operator through a lettered hole in the plate.

HALL BRAILLE WRITER

Cat. 40801, Neg. 415929.

Constructed by Frank H. Hall, C. A Sieber, and T. B. Harrison, about 1891, for the purpose of embossing the alphabet on paper under the system of embossed writing for the blind devised by Louis Braille. The Braille system enabled the blind to read and, with the Hall machine, the method of embossing was greatly enhanced. Manufactured by the Munson Typewriter Co., Chicago, Ill



HAMMOND

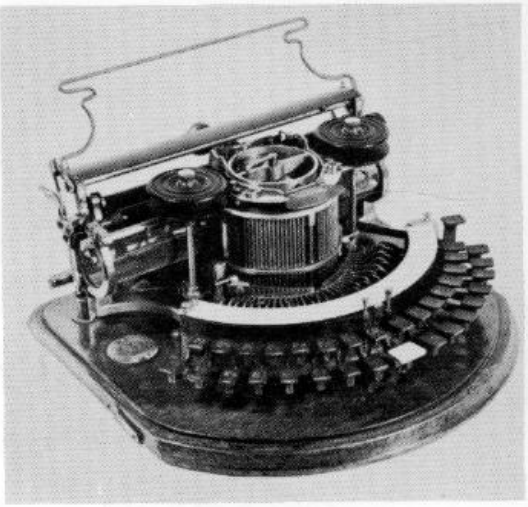
Cat. 41632, Neg. 415855.

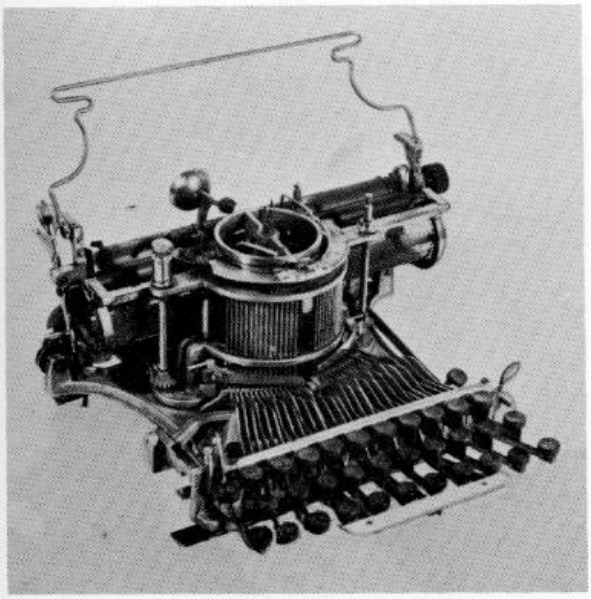
One of the outstanding machines in the history of the typewriter industry. It was invented by James B. Hammond. In 1880, soon after the REMINGTON typewriter had been shown to be commercially practical, Hammond and E. J. Manning developed the fundamental principles of the HAMMOND typewriter involving a most radical departure from the type-bar machines. This was a beautiful machine in appearance and construction, and featured an interchangeable partial wheel containing the type, thus enabling the operator to change from one language to another by the simple process of changing the type-discs. The machine was also equipped with the Hammond Idéal keyboard. However, the public had become so accustomed to the standard keyboard that the Ideal failed to supplant it.

HAMMOND No. 2 (a)

Cat. 41724, Neg. 415998.

Produced in 1893 by the Hammond Typewriter Co., New York, N. Y. It was made with a circular keyboard.





HAMMOND No. 2 (b)

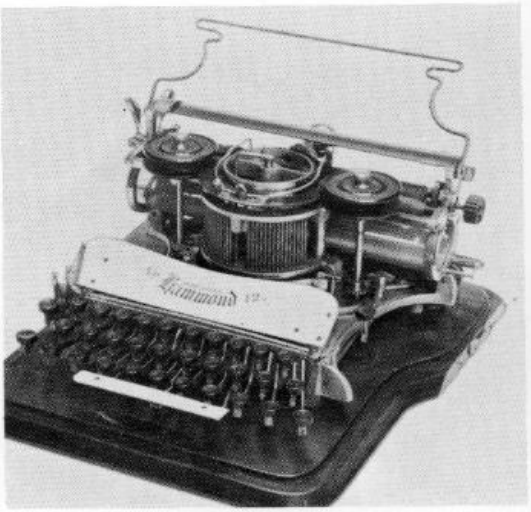
Cat. 40689, Neg. 416009.

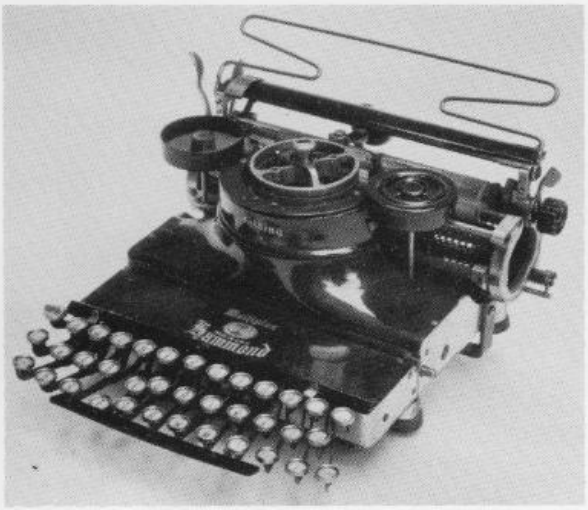
Produced in 1893 by the Hammond Typewriter Co., New York, N. Y. It was made with a rectangular keyboard.

HAMMOND No. 12

Cat. 40666, Neg. 419778.

Produced in 1905 by the Hammond Typewriter Co., New York, N. Y.

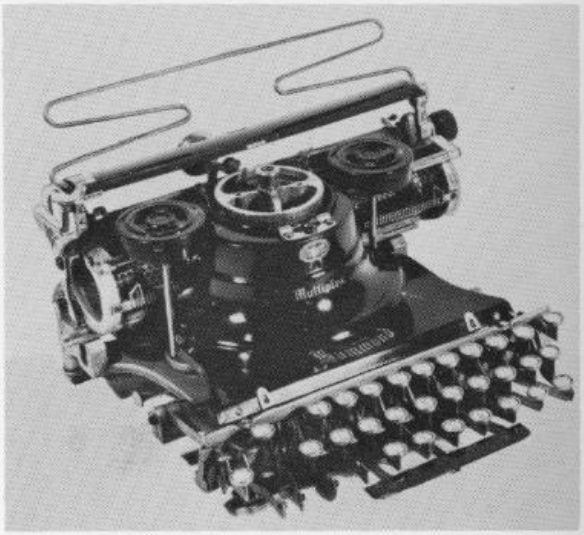




HAMMOND FOLDING

Cat. 41726, Neg. 415919.

A further development of the HAMMOND. The folding feature to acquire portability was designed by Charles O. Noak in 1921.



HAMMOND MULTIPLEX (a)

Cat. 40688, Neg. 416006.

Produced in 1910 by the Hammond Typewriter Co., New York, N. Y.

HAMMOND MULTIPLEX (b)

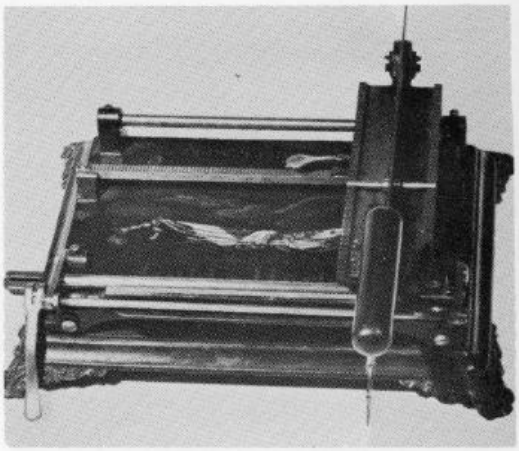
Cat. 42053, Neg. 416079.

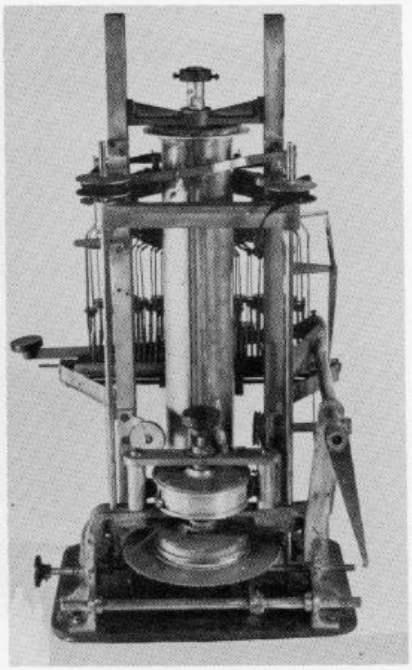
Produced in 1923 by the Hammond Typewriter Co., New York, N. Y.

HAMMONIA (German)

Cat. 46027, Neg. 420921.

In 1884, ten years after the first commercially produced typewriter (the SHOLES & GLIDDEN) appeared in America, the HAMMONIA came to light in Germany, the first European typewriter. It was of original design, resembling a bread slicer. The types were cast on the bottom of a brass rod which, when moved forward or backward, brought the desired type in its correct position over the platen. Then, depressing the type-rod, the imprint was accomplished. A scale or diagram, identical with the arrangement of the type on the brass bar, was located on the base of the machine to indicate when the desired type was in striking position. The inventor was H. A. H. Guhl of Hamburg, member of the firm of Guhl and Harbeck of Hamburg, Germany. It belongs among the indicator class of writing machines, all of which were slow in operation.





HANSON

Cat. 40800, Neg. 422494-B.

Originally invented by Walter H. Hanson of Milwaukee, Wis. The only typewriter produced with a vertical platen, the revolving of which was to facilitate quicker return to the starting point of writing. While radically different from other typewriters, it was just another impractical experiment.

The identical machine is illustrated in Mares (English) History of the Typewriter (published 1909) as the HANSON-LEE, naming Walter H. Hanson of Milwaukee as the inventor.

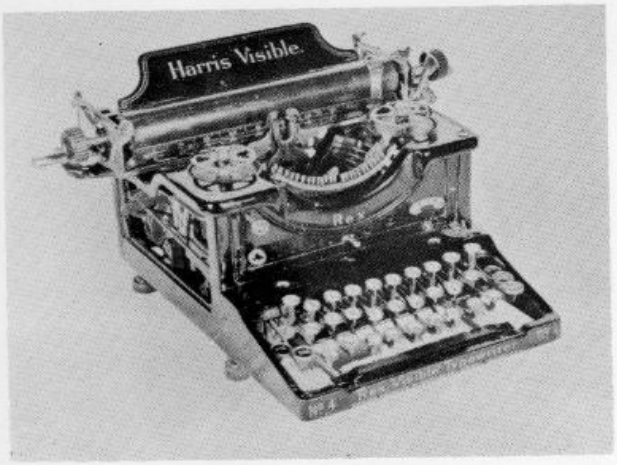
In the Typewriter History and Encyclopedia (published 1923) C. S. Nickerson, a Presbyterian minister, is given credit as the inventor of the vertical platen typewriter, he having established the Nickerson Typewriter Co., 30-32 So. Canal Street, Chicago, in March, 1907, in preparation for its manufacture, which, however, was never accomplished. Reverend Nickerson was known to have also resided in Racine, Wisconsin, while he was experimenting with this machine.

HARRIS

Cat. 40796, Neg. 415905.

A three-bank, front-stroke, visible machine invented in 1911 by D. C. Harris, and produced by the Harris Typewriter Co., Fond du Lac, Wis. Under the name of HARRIS the machine was made for the mail-order trade of Sears Roebuck & Co.

In 1914 the name of the company was changed to Rex Typewriter Co., and under the name REX the machine was sold through other channels of trade. In 1916 the same company also began the production of the NATIONAL PORTABLE, and in 1921, the DEMOUNTABLE.



HARRIS VISIBLE No. 4

Cat. 41694, Neg. 416049.

Produced in 1914 by the Rex Typewriter Co., Fond du Lac, Wis. It was sold by the American Can Co., Chicago, Ill.

HARTFORD

Cat. 46508, Neg. 420586.

This was one of the blind-writing type of machines placed on the market in 1894 by John M. Fairfield of Hartford, Conn., the factory being at Hartford. Fairfield had gained his experience with the CALIGRAPH. The factory was later moved to Cleveland, Ohio, and a new and improved model was brought out under the name CLEVELAND.

HARTFORD No. 3

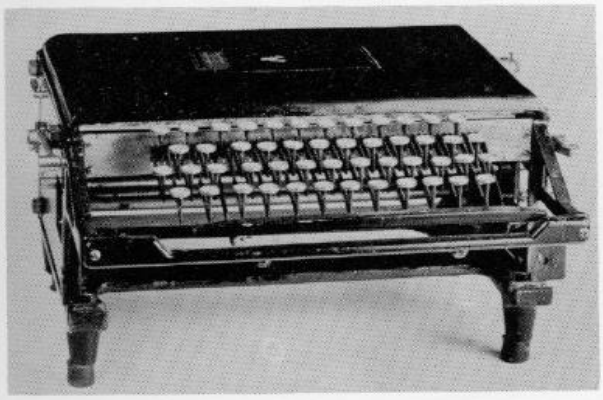
Cat. 41746, Neg. 415878.

Produced in 1905 by John M. Fairfield, Hartford, Conn. It had a four-bank keyboard with a single shift.

HERMES (Swiss)

Cat. 46784, Neg. 423411.

Produced in 1923 by E. Paillard & Co., St. Croix, Switzerland. It was a front-stroke, four-bank machine with many features found in the MONARCH typewriter.



HOOVEN AUTOMATIC

Cat. 47374, Neg. 423419.

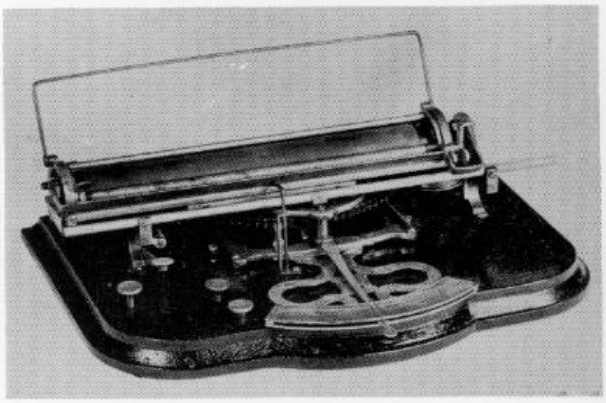
Invented in 1912, this typewriter operated through perforated paper rolls similar to those of a player-piano. A perforating machine cut the perforations in the paper roll; the latter was then run through another machine which was attached to a regular typewriter, and, under motor power, the work was run off automatically.

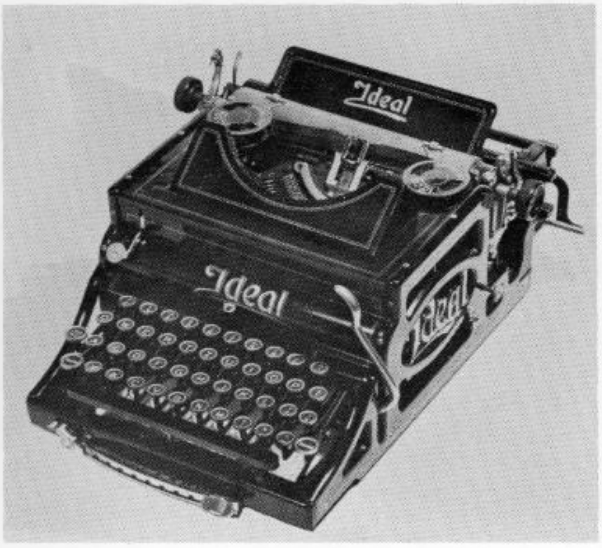
Originally produced as the NATIONAL AUTOMATIC, in Cincinnati, Ohio, the name was later changed to the HOOVEN, and the name of the company to Hooven Automatic Typewriter Co., with the factory at Hamilton, Ohio.

HORTON (?)

Cat. 50098, Neg. 423420.

This very peculiar and unusual typewriter is believed to be a HORTON. It differs entirely from the HORTON invented in 1883 by E. E. Horton of Toronto, Canada, which was a type-bar machine with the type-bars resting in an oblique position similar to those of the IMPERIAL-VISIBLE and BURNETT. This model contains no patent numbers or other marks which might aid in determining its inventor or name. The large H in its frame is only a slight clue to its identity. Its small type-levers perform a very remarkable revolution when striking the platen, entirely different from those of any other known machine.





IDEAL (German)

Cat. 44226, Neg. 421075.

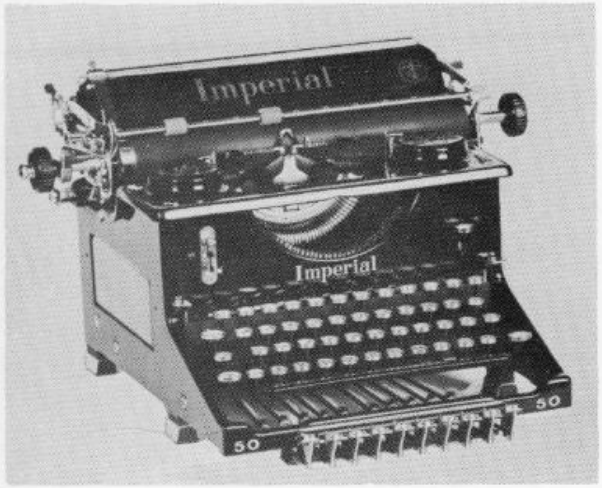
Constructed in 1900, the original of this well-constructed four-bank, single-shift, standard-keyboard machine differed from the usual front-stroke variety in that the position of the type-bars was at an angle of 45 degrees instead of horizontal, similar to the IMPERIAL-VISIBLE. The Seidel & Naumann Corporation of Dresden, Germany, which had an excellent reputation as manufacturers of bicycles and sewing machines, manufactured the IDEAL, which found a large market in both Germany and other foreign countries. In later models the standard front-stroke principle was adopted.

The IDEAL continued to be one of the foremost in the German typewriter field.

IMPERIAL (a) (English)

Cat. 45726, Neg. 416090.

Invented in 1908 by Hidalgo Moya, of Leicester, England, and manufactured by the Imperial Typewriter Co., Ltd., of the same city. This machine used a type-bar mechanism similar to that of the BAR-LOCK, FRANKLIN, and others, in which the type-bars stood upright and struck downward away from the operator. It had a keyboard with three banks of keys and double-shift. Also sold under the names: AJAX, NEW IMPERIAL, TYPO, and LLOYD.



IMPERIAL (b) (English)

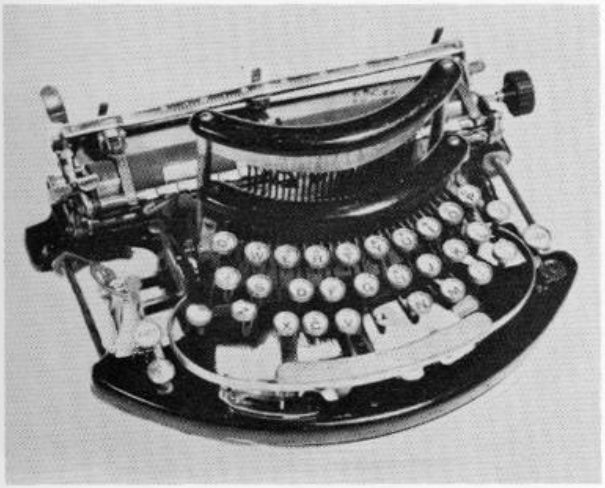
Cat. 45011, Neg. 416138.

This model was produced in 1927 by the Imperial Typewriter Co., Ltd., of Leicester, England, and differed from the machine originally produced by this company (1908). The new machine contained most of the features expected in an up-to-date writing machine.

IMPERIAL No. 1

Cat. 47541, Neg. 423443.

Produced in 1912 so far as can be learned, this was the REMINGTON No. 10 renamed IMPERIAL for easier sale in the British possessions. The idea was apparently soon abandoned.



IMPERIAL VISIBLE

Cat. 41753, Neg. 418886.

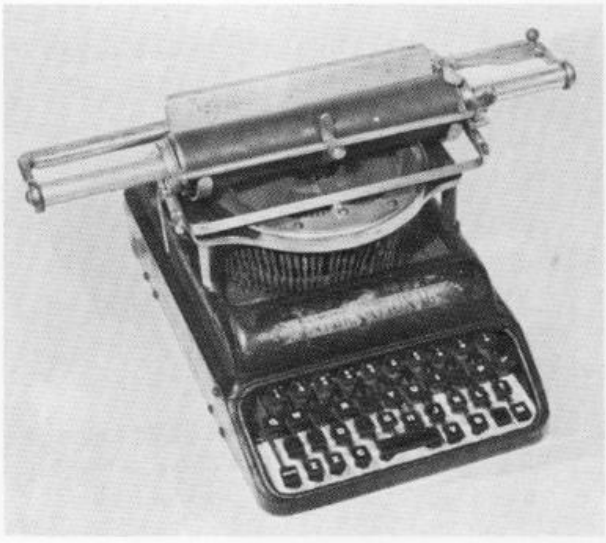
A visible writing machine, using the same oblique position of the type-bar as the HORTON, made in 1907, in the same factory in Kenosha, Wis., in which later the SHOLES-VISIBLE was produced. Milwaukee capital and personnel were engaged in this venture which lasted but a few months. In October, 1907, the business went into receivership.

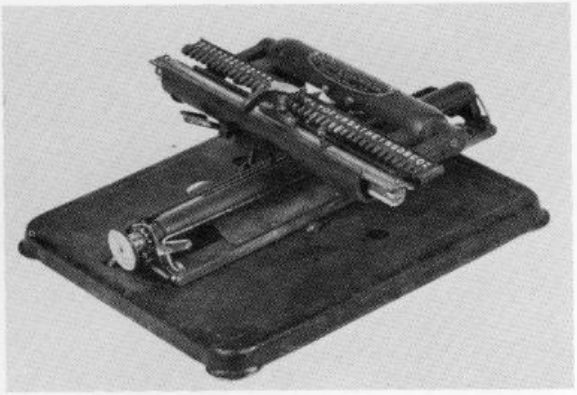
As the TRIUMPH VISIBLE, it was sold from New York offices; while as the IMPERIAL VISIBLE it was distributed from headquarters.

INTERNATIONAL (a)

Cat. 47976, Neg. 423969.

Invented in 1889 by Lucien Stephen Crandall, New York, N. Y., who also produced the second practical typewriter, the CRANDALL. The INTERNATIONAL was of the understroke type-bar variety, similar to the REMINGTON, CALIGRAPH, and others, but having various mechanical features distinguishing it from these. It was manufactured in Parish, N. Y.; and enjoyed only a limited sale.





INTERNATIONAL (b)

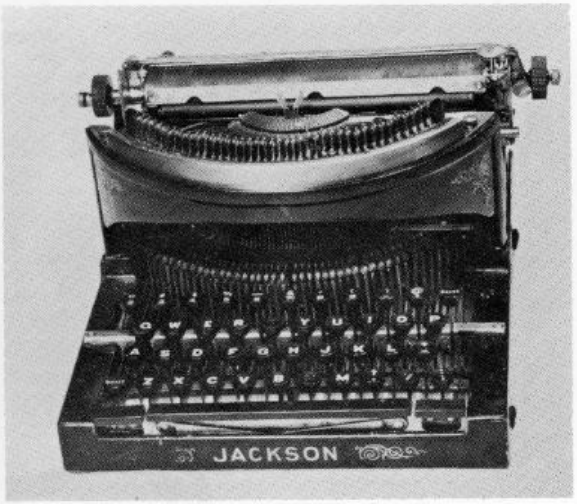
Cat. 45892, Neg. 418890.

Produced in 1890 by the New American Mfg. Co., Chicago, Illinois.

INTERNATIONAL (c)

Cat. 46447, Neg. 420536.

Produced in 1893 with a double keyboard.



JACKSON

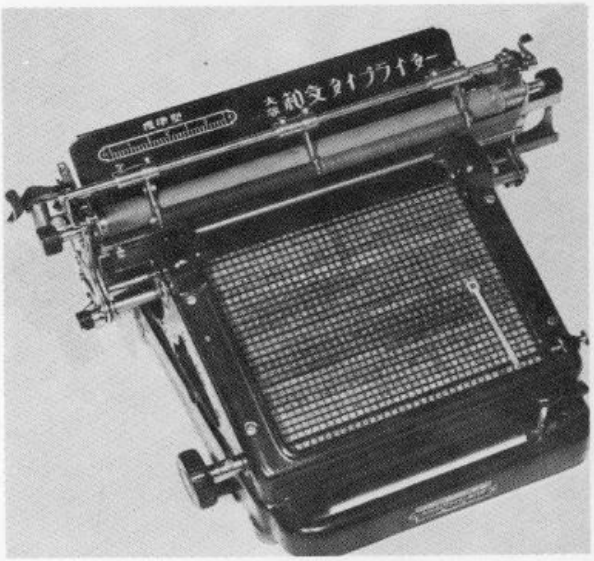
Cat. 47543, Neg. 423441.

Invented in 1898 by Joseph H. Jackson, Hamilton, Ontario, it was manufactured by the Jackson Typewriter Co., Boston, Mass., later of New Haven; Conn. The type-action of the JACKSON was similar to that of the WILLIAMS. The type rested on an inkpad and, when the key was depressed, the type-bar lifted and shot forward to the platen, making the impression. This method of printing direct instead of through a ribbon was claimed as a special feature. The enterprise, like many of its contemporaries, was short lived.

JAPANESE

Cat. 50972, Neg. 425397.

This was an indicator type machine. It had an endless belt on which there were 2740 characters including the English alphabet and numbers. Writing was accomplished by moving the belt and placing the small square opening in the indicator-bar over the character to be written, and depressing the knob appearing on the front of the machine.



JAPY (French)

Cat. 47972, Neg. 423965-A.

On January 22, 1909, due to financial difficulties, a receiver was appointed who sold the equipment of the REMINGTON-SHOLES VISIBLE factory to Japy Freres & Co., Beaucourt, France, where the same machines, with some improvements, were thereafter produced as the JAPY.

JEWETT

Cat. 46615, Neg. 415870.

Produced in 1892 by the Jewett Typewriter Co., Des Moines, Iowa. It succeeded the DUPLEX. It was a double-keyboard machine similar in appearance to the SMITH-PREMIER and the PEERLESS. An aggressive advertising campaign was carried on, resulting in fair success both in America and abroad. Production was discontinued about 1910.

JEWETT No. 1; DUPLEX

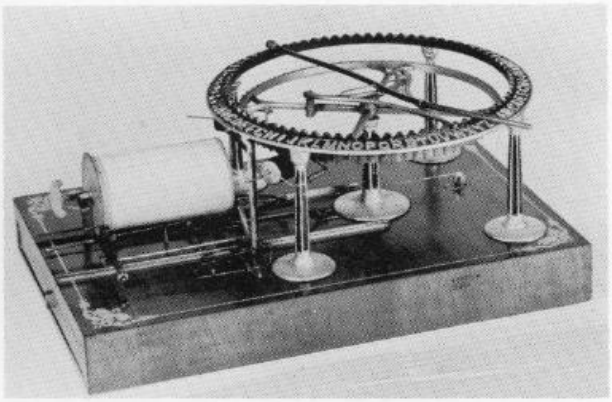
Cat. 41747, Neg. 422201.

Constructed in 1892 by A. S. Dennis, Cleveland, Ohio. It was manufactured by the Duplex Typewriter Co., Des Moines, Iowa. This was the first machine that wrote two letters at the same time.

JEWETT No. 2

Cat. 41715, Neg. 416002.

Produced in 1895 by the Jewett Typewriter Co., Des Moines, Iowa.



JONES MECHANICAL TYPOGRAPHER

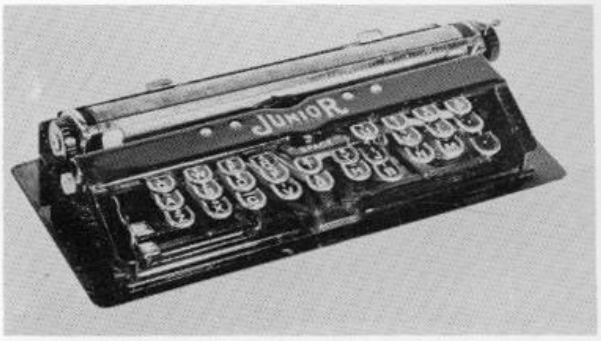
Cat. 47377, Neg. 423427.

On June 1, 1852, John M. Jones of Clyde, N. Y., was awarded Patent No. 8980 for his MECHANICAL TYPOGRAPHER. In 1853 he mounted his specimen in its mahogany glass case and exhibited it at the First American World's Fair, held in Crystal Palace, New York City. The poem on the platen was written by the inventor himself, offering an excellent sample of the work of the machine. After the fair was over, Jones took this specimen to his home in Clyde. A few months later, the factory in Palmyra, N. Y., where 130 of his typographers were in process of manufacture, burned to the ground. The only machines remaining were the one in the patent office in Washington, D. C., and the one in his home. A grandson, Harry A. Jones, took the inventor's model in its glass case to Los Angeles, Calif., where in 1931 it was loaned to the Los Angeles Museum. In 1939 it was purchased by Mr. Carl P. Dietz and donated to the Milwaukee Public Museum, where it is to remain as a permanent part of the collection. It is still in its original glass case, perfectly preserved, just as it was exhibited at the First American World's Fair over one hundred years ago.

JUNIOR

Cat. 41770, Neg. 415897.

Invented in 1907 by Charles A. Bennett, Dover, N. J., and produced by the Junior Typewriter Co., New York, N. Y. A typewriter of a size to fit the overcoat pocket, it was neater in appearance than it was practical. This machine was a clever piece of mechanism, designed to be a real utility, but containing parts (especially the hair spring for returning the depressed keys) which were too frail to stand the strain of continued use. It used a type-wheel similar to that of the BLICKENSDERFER. The inking was accomplished by means of an inkpad. Because of the novelty in design and size, it enjoyed a fair sale until its weaknesses became apparent.



KANZLER (German)

Cat. 44223, Neg. 421076.

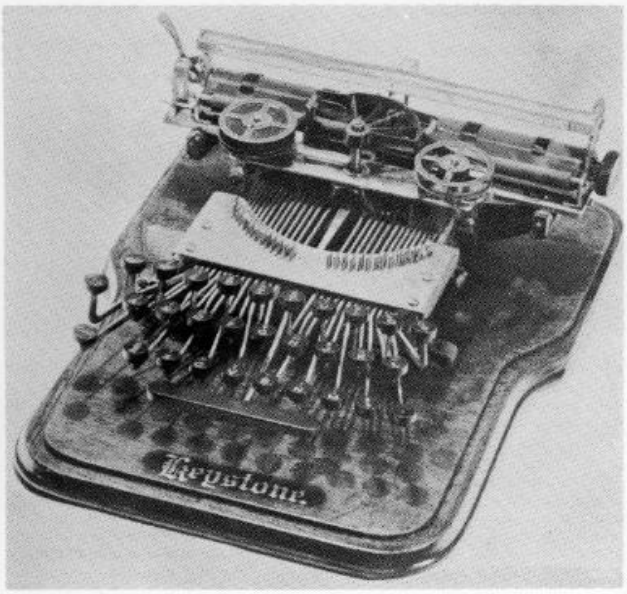
Constructed in 1903 by Paul Grutzman. At first glance this machine was comparable to the RAPID, WELLINGTON, FORD, and other so-called forward-thrust machines. However, the KANZLER differed in an important feature: each type-bar possessed eight type. The type-bar mechanism, in addition to the forward movement, also moved upwards and downwards to bring the desired type into striking position. A similar up-and-down movement of type-bars was used on the American noiseless typewriters, the number of type on each bar, however, being four. This machine was produced by the German Typewriter Co. which later became the Typewriter Industry Corporation, and finally the Kanzler Typewriter Corporation, all of Berlin, Germany.

It was also known as HANSA, RAPID, and CHANCELLOR.

KAPPEL (German)

Cat. 42059, Neg. 416088.

Constructed in 1914, the KAPPEL was a well-constructed machine with standard four-bank, single-shift keyboard. Originally designed by Otto Roessler and Bernhard Dost, and produced by the Maschinenfabrik Kappel AG. in Chemnitz-Kappel, from which city the machine derived its name.



KEYSTONE

Cat. 42209, Neg. 416108.

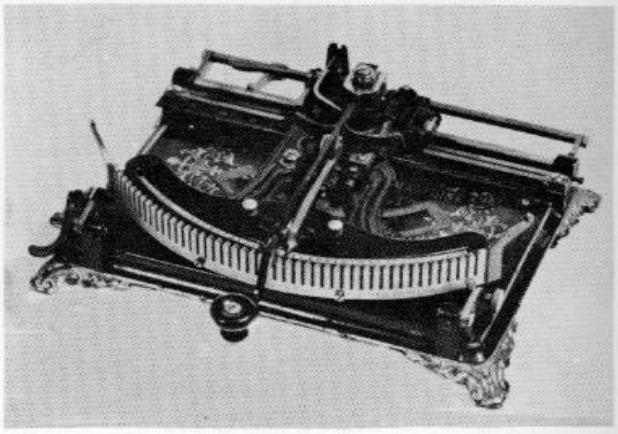
Produced in 1899 by the Keystone Typewriter Co., Harrisburg, Pa. This machine was similar in appearance to the COMMERCIAL VISIBLE and the POSTAL. Instead of using a type-wheel, a partial wheel similar to that used in the HAMMOND was employed. Depressing the key brought the proper letter in position, whereupon a hammer in the rear of the machine struck against the paper, making the impression of the type. This hammer principle was also used in the CHICAGO or MUNSON. Inking was effected by means of a ribbon.

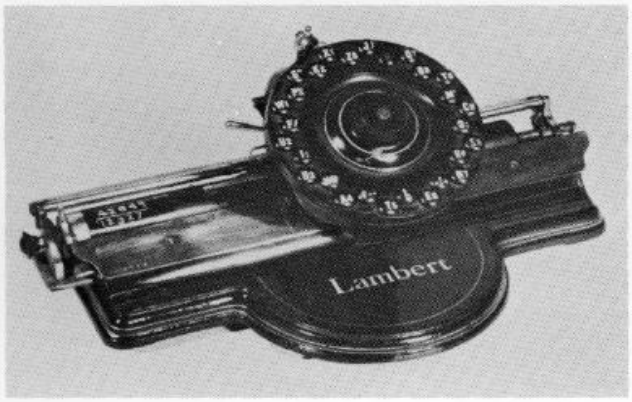
The KEYSTONE had 28 type-keys with two shift-keys, and wrote 84 characters.

KOSMOPOLIT (German)

Cat. 44225, Neg. 421072.

Produced in 1888, this was an indicator typewriter, resembling some of the modern checkwriters. It was made in the factory of Guhl & Harbeck in Hamburg, Germany, where the HAMMONIA (the first European typewriter) was also made. The types were cast in two rows on rubber in circular fashion. Moving the indicator into proper position over the grooved scale, and pressing downwards, accomplished the printing.





LAMBERT

Cat. 42049, Neg. 416091.

Invented in 1896 by Frank Lambert, Brooklyn, N. Y., it was different from any other machine. Pressure on an indicated point on the circular dial revolved a vulcanized rubber type-wheel, bringing the required letter into position over the platen. Further pressure brought the type down to make the impression. Inking was effected by means of a circular inkpad located between the type-wheel and the platen. Lambert is said to have spent seventeen years in perfecting this invention.

LIBERTY

Cat. 41744, Neg. 415921.

After the failure of the MOLLE, in 1918, Chicago capital became interested in reproducing the identical machine under the name LIBERTY. The three-bank feature, which proved to be the deterrent to success in the former, also prevented the new venture from thriving. Produced in 1923 by the Liberty Typewriter Co., Chicago, Ill.

LINOWRITER — Smith-Premier

Cat. 41664, Neg. 415951.

In 1910 the Empire Type Foundry, Buffalo, N. Y., changed the type arrangement of the SMITH-PREMIER typewriters to conform to the keyboard of the LINOTYPE machines so that operators of linotype machines could also operate typewriters with equal facility.

MANHATTAN

Cat. 41719, Neg. 415884.

Produced in 1898, it was practically a reproduction of the REMINGTON No. 2 (patents on many of the features of the latter having expired). It offered very little that was new, and although it experienced a fair sale for a few years, it failed to stand the strain of competition, and the Manhattan Typewriter Co., New York, N. Y., expired. Waldon Blake later organized the Blake Typewriter Co., Newark, N. J., and tried to revive this machine, but without much success.

MAP (French)

Cat. 47971, Neg. 423964.

Invented in 1921 by Halcolm Ellis, manufactured by Manufacture d' Armes de Paris, St. Dennis, France. It was a four-bank, front-stroke, double-shift machine. The entire type basket was interchangeable.

MASKELYNE (English)

Cat. 42063, Neg. 416094.

Invented and produced in 1893 by John Nevil Maskelyne and his son, John, Jr., this type-bar machine was similar to the WILLIAMS, but instead of having two banks of type-bars, it had one, with the carriage in the rear of the machine. Three types were cast on each bar, being operated with double-shift and a three-bank keyboard. Several models were produced, but very few sold outside of England. Production ceased soon after 1910.

MASSPRO

Cat. 41768, Neg. 415923.

Produced in 1932, this small, three-bank, double-shift, forward- or front-stroke machine was designed by George F. Rose, who had previously designed the STANDARD-FOLDING PORTABLE. It was manufactured by the Mass Production Corporation, New York, N. Y., with the intention of producing large quantities and flooding the market at a price of $25.50. No doubt the three-bank keyboard proved the stumbling block in this, as it had in so many other ventures, and after a brief existence the MASSPRO disappeared from the market.

McCOOL

Cat. 44471, Neg. 421171.

Invented in 1904 by William W. McCool and manufactured by the Acme-Keystone Mfg. Co., Beaver Falls, Pa. A type-wheel machine having 319 parts, its low price was not sufficient to create a large sale, and it soon joined the "big parade" of writing machine experiments.

MENTOR (German)

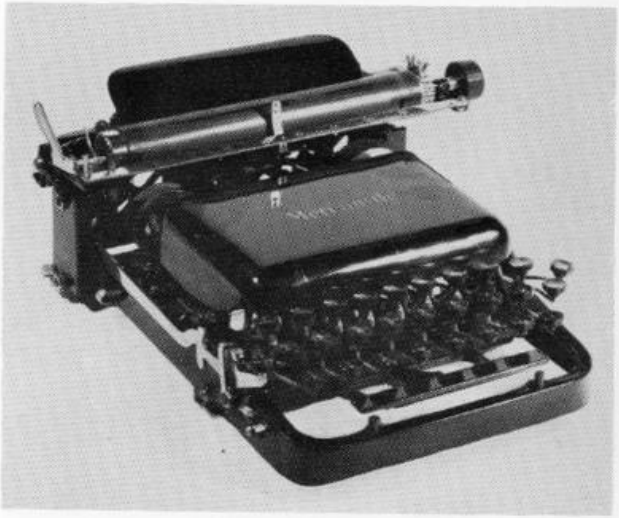
Cat. 47974, Neg. 423967.

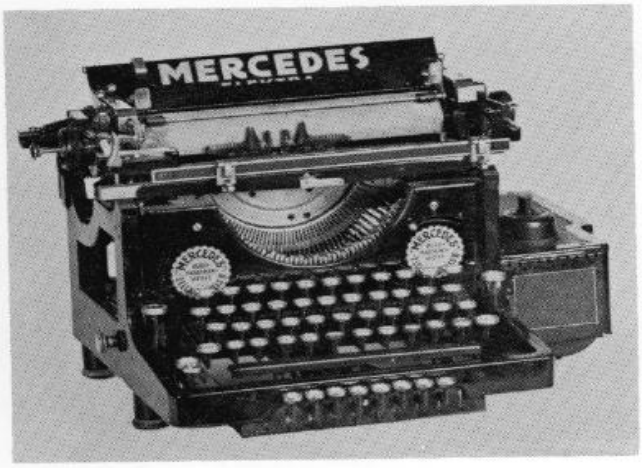
Produced in 1909, this was a semi-portable, four-bank, single-shift machine, the type-bars resting in an oblique position as in the IDEAL. Originally manufactured by Metallindustrie Corp., Schoenbeck-on-the-Elbe, Germany, and later by Bauchwitz-Pacherer & Company, Leipzig, Germany. Production ceased in 1926. It was also known as MONOFIX and THURINGIA.

MERCANTILE

Cat. 41885, Neg. 416028.

Produced in 1908 for the European trade. This machine was also sold under the names EAGLE, FLEET, ELGIN, PULLMAN A, and SURETY A. It was a development of the AMERICAN.



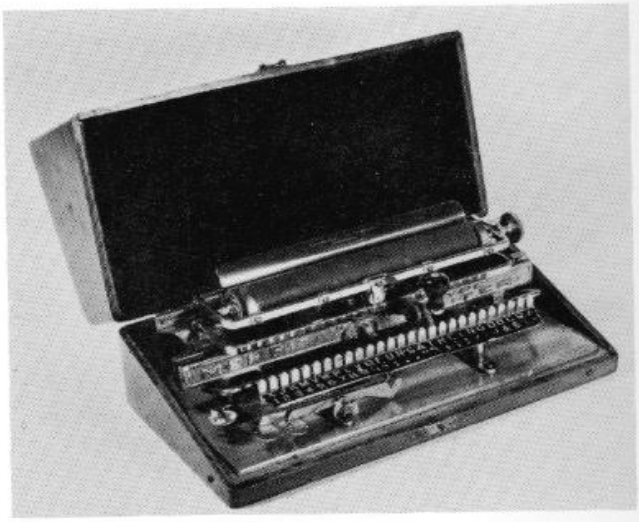


MERCEDES ELEKTRA (German)

Cat. 45007, Neg. 41o147.

This electrically operated machine was produced in 1921, by the Mercedes Office Machines Corporation, Zella-Mehlis, Thuringen, Germany. It met with considerable success, especially in Germany.

The MERCEDES was also sold under the following names: DRAKE-LONDON, KOLUMBUS, MERCEDES-EXPRESS, MERCEDES-FAVORIT, PROTOS, and COSMOPOLITA.



MERRITT

Cat. 41637, Neg. 415861.

Produced in 1899 by the Merritt Mfg. Co., Springfield, Mass. Printing was accomplished by pressing a lever into the slot of the character to be printed.

MERZ (German)

Cat. 50271, Neg. 425393.

Invented in 1926 by Ing. Adolph Schauss, this was a typewriter of intermediate size, designed to be used as a portable when desired, and also durable enough to meet the requirements of a standard-sized machine. Model 1 appeared in 1926, Model 2 in 1927, and Model 3 in 1928. The machine found a favorable market, especially in Germany, where it was manufactured by Merz-werke, in Frankfurt-am-Main, Roedelheim. It had a standard, four-bank, single-shift keyboard.

In France it was sold as the CONCORD.

MIGNON (German)

Cat. 44472, Neg. 421172.

Constructed in 1904 by Dr. Fredrich von Hefner-Alteneck, this original and ingenious indicator style of machine had an elongated or "finger" type-wheel. When the adjoining indicator point was moved over the letter and character scale to the desired letter, the type-wheel automatically revolved and moved upwards or downwards, bringing the desired type in striking position. Thereupon, by depressing a striking lever, the type-wheel was brought sharply downward on the platen, thus making the impression. Only a fair degree of speed was obtainable, which sufficed for those writing few letters. Like most wheel typewriters, the interchangeability of the type-wheel from one style of type to another was an advantageous feature. The same machine was introduced in the United States as the YUESS. It was also known as OLYMPIA PLUROTYPE.

MOLLE

Cat. 41740, Neg. 415911.

John E. Molle, for many years a jeweler in Sturgeon Bay, Wis., had been repairing typewriters because there were no typewriter mechanics in the vicinity. Thus was born his interesting writing machines, and in 1906 he made his first model, which however did not satisfy him. By 1914 he had made a second model. Thereupon he organized the Molle Typewriter Co., Antigo, Wis. In June, 1918, announcement was made that Model No. 3 had been completed and manufactured by the company at a factory in Oshkosh, Wis.

Mechanically the machine had merit, but having a three-bank, double-shift keyboard, which was being replaced by other producers with the four-bank, single-shift adjustment, it was at a disadvantage, which accounts for its early failure.

MONARCH

Cat. 41717, Neg. 415891.

Produced in 1904 in Syracuse, N. Y., in the same factory which made the REMINGTON, SMITH-PREMIER, YOST, and other machines. The MONARCH had a light touch; the movement of the type-bars could be accelerated by means of a set screw, and a shifting segment permitted the use of a very wide carriage which was readily interchangeable.

Prominent in its production and sales were J. F. Tanner and E. E. Barney. In May, 1908, the factory was moved to New York City.

MONARCH No. 2

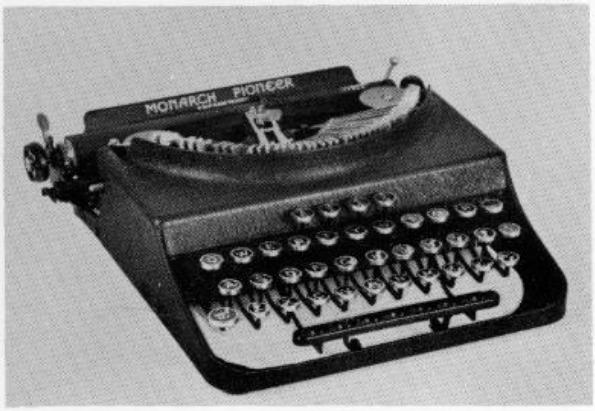
Cat. 46612, Neg. 415971.

Produced in 1904 in Syracuse, N. Y.

MONARCH No. 3

Cat. 41911, Neg. 415969.

Produced in 1906 in Syracuse, N. Y.



MONARCH PIONEER

Cat. 45894, Neg. 418888.

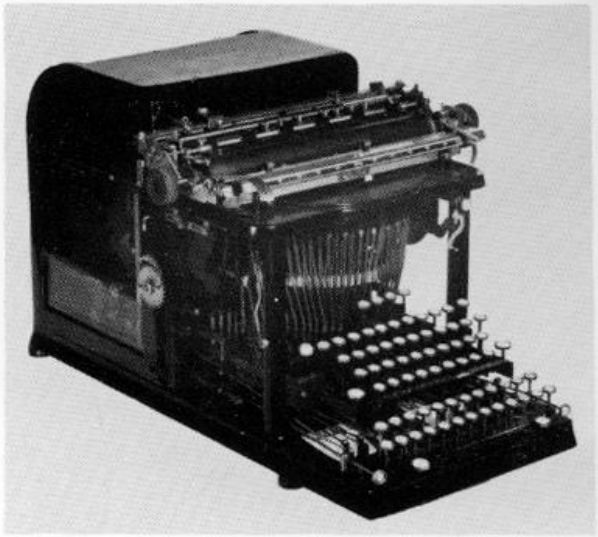
Constructed in 1920 by John H. Barr, and manufactured by the Remington Rand Co. It was a portable, front-stroke, three-bank, single-shift machine.

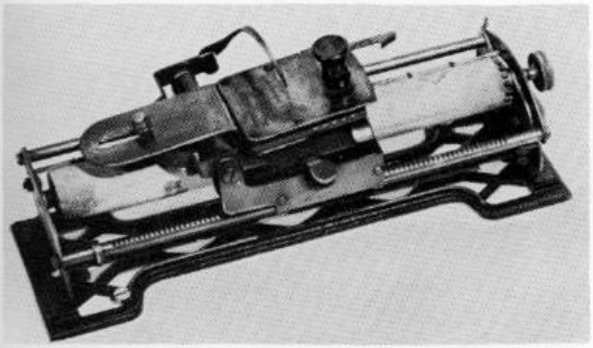
MOON HOPKINS

Cat. 48598, Neg. 424428.

A combined type and figure-writing machine with accompanying arithmetical calculator. A product of St. Louis, Mo., where Hubert Hopkins, with the financial assistance of James L. Dalton of Poplar Bluff, Mo., invented and designed it in 1902.

Application for patent was made in 1903, but was not granted until September 24, 1912. In 1903 Hopkins sold his interest in the invention to American Arithometer Co. (now Burroughs Adding Machine Co.). Hopkins, after disposing of his interest, secured the financial aid of John C. Moon, and organized the Moon-Hopkins Billing Machine Co., St. Louis, Mo. Control was finally acquired by the Burroughs Adding Machine Co. of Detroit, Mich.



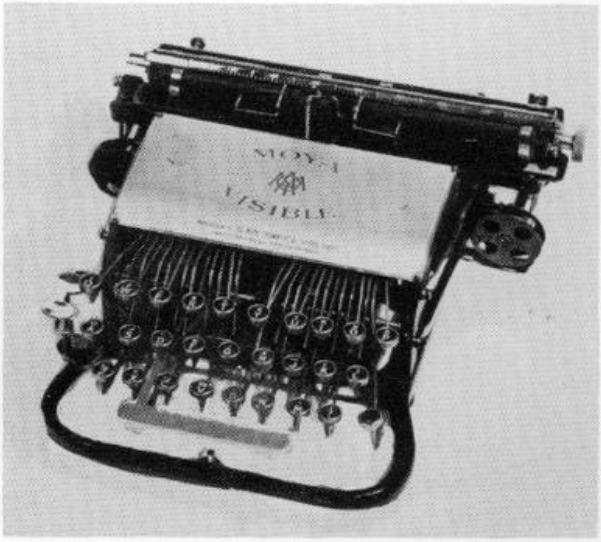


MORRIS

Cat. 45581, Neg. 418880.

Invented in 1885 by Robert Morris, Kansas City, Mo. In 1886 Morris sold the manufacturing rights to the Hoggson Mfg. Co., New Haven, Conn.

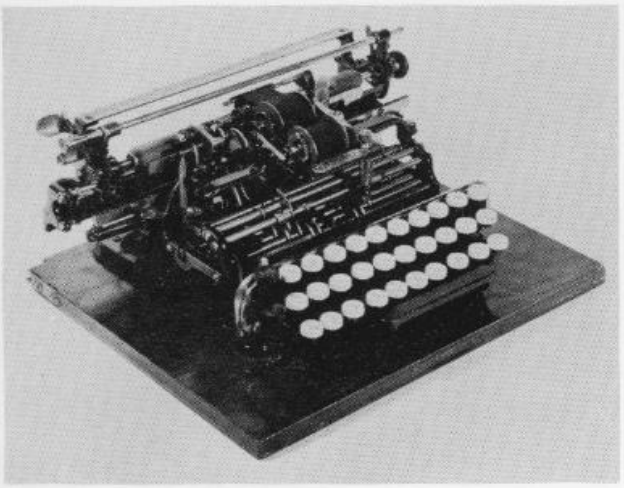
Operation was similar to that of the HALL, resembling that of the modern "punch board."



MOYA (English)

Cat. 44230, Neg. 421070.

Invented in 1902 by Hidalgo Moya and produced by the Moya Typewriter Co., Leicester, England.



MUNSON

Cat. 41063, Neg. 415864.

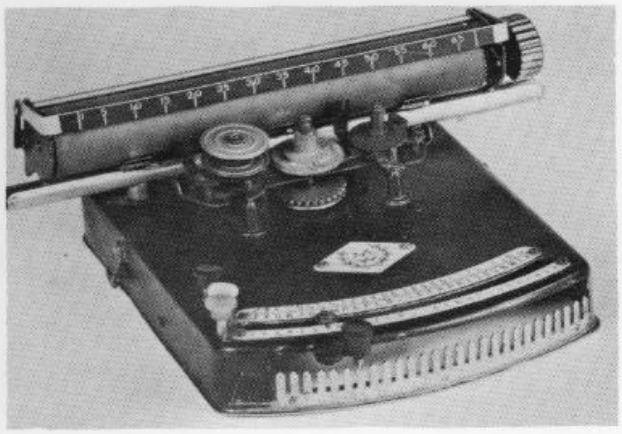
Invented in 1890 by Samuel John Seifried of Chicago, and James Eugene Munson of New York. An elongated-sleeve type-wheel, similar to that used in the CRANDALL, was operated horizontally with three-bank keyboard and double shift. The type-wheel was interchangeable, enabling the machine to be used for different languages. A hammer in the rear of the machine struck the paper against the type-wheel to make the impression.

MUNSON No. 3

Cat. 41017, Neg. 419772.

Originally it was produced in 1897 and manufactured by the Munson Typewriter Co., Chicago, Ill. In 1898 the name was changed to CHICAGO, and the company name to Chicago Writing Machine Co. It was also marketed under the names DRAPER, CONOVER, and BALTIMORE.

In 1912 the factory was moved to Galesburg, Ill., and the machine was produced by the Galesburg Writing Machine Co., under the name GALESBURG. It continued on the market until 1917.



M-W (German)

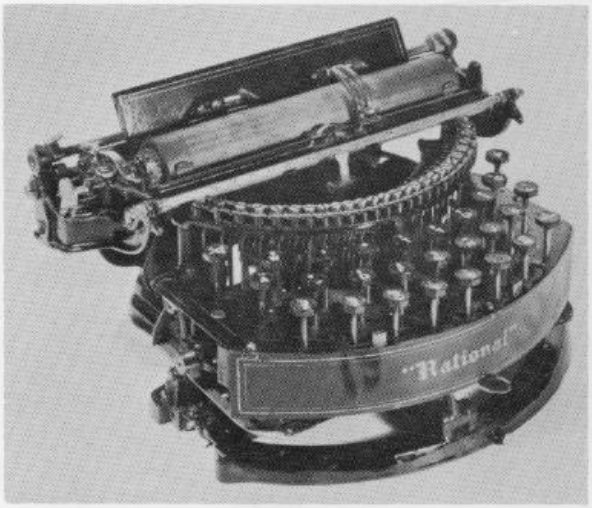
Cat. 47378, Neg. 423422.

Invented in 1924 by Paul Muchajer. Produced by Gundka Works, Brandenburg, Germany. Also sold under the names GUNDKA, G & K, GEFRO, PERLITA, and WRITE EASY.

NATIONAL

Cat. 13159, Neg. 415862.

Invented in 1889 by Henry Harmon Unz. It was produced by the National Typewriter Co., Philadelphia, Pa. It had a large sale in England and Germany.



NATIONAL PORTABLE

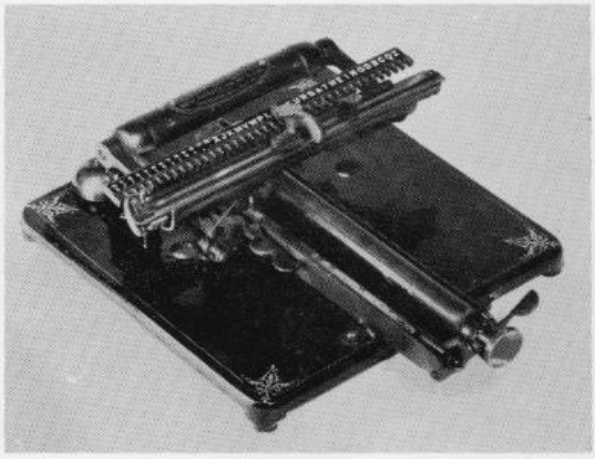
Cat. 41888, Neg. 416041.

Three models of this portable machine were offered, as follows: the No. 2 was produced by the Rex Typewriter Corporation, Fond du Lac, Wis. With the production of the No. 3 in 1918, the business was taken over by the American Can Co., Chicago, Ill. In 1920 the Rex Typewriter Co. again acquired control and, as the National Typewriter Co. of Fond du Lac, offered the No. 5, which was also sold under the name of PORTEX, a contraction of the words "portable" and "Rex." All were three-bank, double-shift, front-stroke, visible writers.

NEW AMERICAN

Cat. 46613, Neg. 422204.

In 1918 another attempt was made to revive the machine which first appeared in 1885 as the SUN, second in 1891 as the ODELL, third in 1913 as the INTERNATIONAL, and finally as the NEW AMERICAN. What there was new about it was nowhere apparent.



NEW CENTURY CALIGRAPH

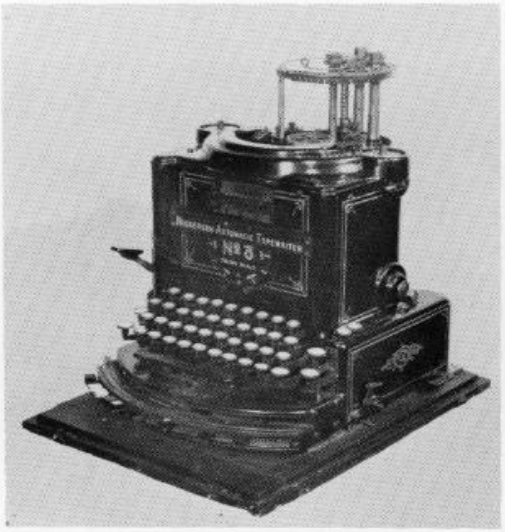
Cat. 47376, Neg. 416046.

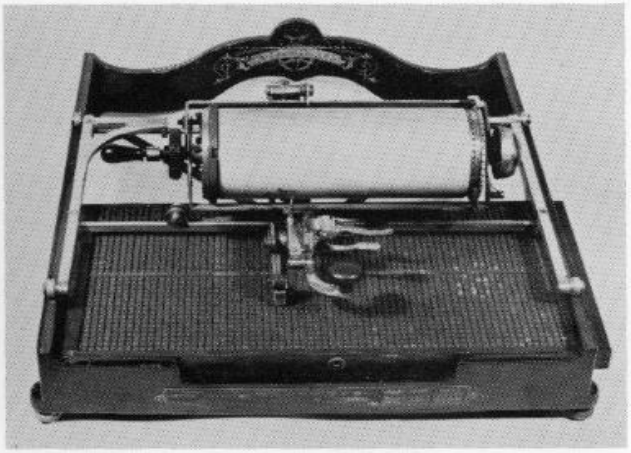
The American Writing Machine Co. of New York, which brought out the CALIGRAPH, at the turn of the century (1900) changed the entire design of its product into this then modern double-keyboard machine. Walter J. Barron was its designer. The former CALIGRAPH arrangement of keys was abandoned and the standard arrangement used on the SMITH-PREMIER, PEERLESS, JEWETT, and others was adopted. Several successive models were produced which maintained a high place among their competitors, until the double keyboard was generally abandoned.

NICKERSON

Cat. 50657, Neg. 425400.

Constructed by Walter H. Hanson who died at the age of 21 years, before the machine had been completed. Upon his death, Rev. Lee, who had been a silent partner, took over. He, not being a mechanic, turned the unfinished machine over to the Rev. Charles S. Nickerson. A patent was granted in 1909. Rev. Nickerson organized a manufacturing company in Chicago, Ill., but with no success. Later he moved to New Haven, Conn., where he was given a grant by the American Telegraph and Telephone Co. Although much money and time had been spent, only this one machine was produced.





NIPPON (Japanese)

Cat. 42067, Neg. 416098.

Produced in 1915 by the Nippon Typewriter Co., Ltd., Tokyo, Japan. This unusual machine operated as follows: The superstructure is movable to any point over the case containing the lead type. When the indicator is over the proper character, a lever is pressed down which causes a hammer under the type case to press up the required type. At the same instant the type is gripped from above and with a quarter-circular movement strikes the platen to make the impression, after which the reverse movement deposits the type back in its place in the type case. During the circular movement the type has rubbed against a revolving inkpad supplying the ink.

The Japanese language has no alphabet, but is composed of about 12,000 characters, of which about 3,000 are required for general purposes. They are supplied by the central type case and the two auxiliary type cases.

NOISELESS

Cat. 31045, Neg. 415908.

W. P. Kidder of Jamaica Plain, Mass., who had invented the FRANKLIN in 1891, and the WELLINGTON in 1895, had long entertained the idea that the noisy clatter attendant in ordinary typewriting should be eliminated. In consultation with C. C. Colby of Stanstead, Quebec, Canada, it was determined that type action which would produce pressure instead of hammering would be the solution to the problem. Experiments during 1896 to 1904 laid the foundation for practical results. In 1904 the Parker Machine Co., Buffalo, N. Y., was organized for the purpose of perfecting the machine for manufacture. G. E. Mathews, President of the Mathews Northrup Co., publishers of the Buffalo Express, and W. Caryl Ely, a leading lawyer of Buffalo, furnished the capital. Through an exchange of securities, the Parker Machine Co. became the Silent Writing Machine Co. and a large factory at Middletown, Conn., was purchased. On December 31, 1908, the Silent Writing Machine Co., organized the Noiseless Typewriter Co. of Conn., giving it the right to manufacture and sell NOISELESS typewriters throughout the western hemisphere.

In 1912 an engineer of the Noiseless Typewriter Co., N. H. Anderson, devised a type of action which eliminated all cams, the chief source of difficulty besetting the industry. This new mechanism was installed in a sufficient number of machines to prove it efficacious.

NOISELESS PORTABLE

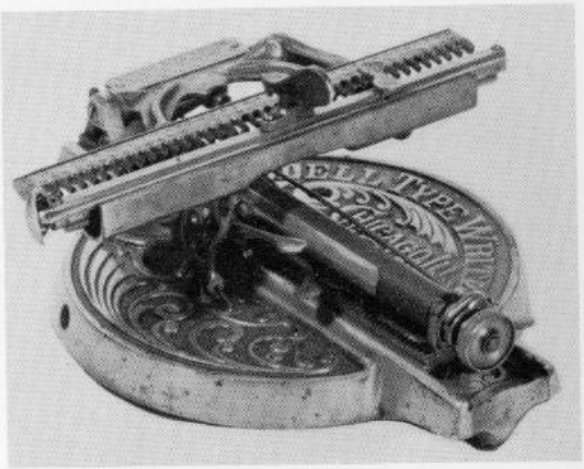
Cat. 40642, Neg. 415920.

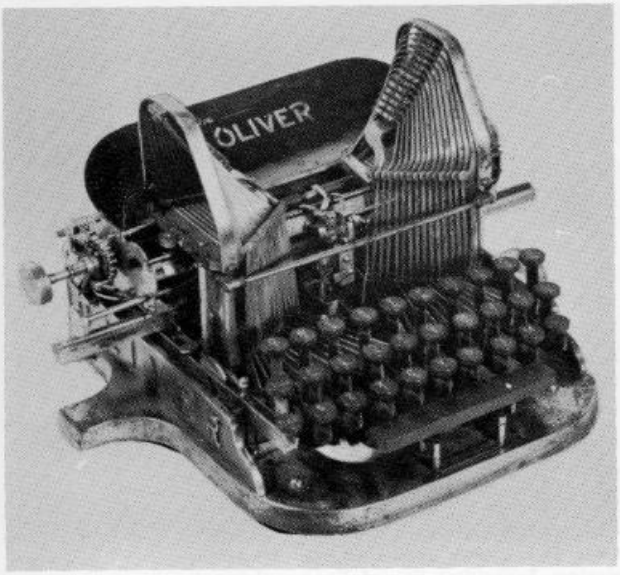
A small, three-bank, double-shift machine embodying the type-bar action of the larger NOISELESS with the latter's other refinements reduced to facilitate portability. Produced in 1921. After 1924 it was produced as the REMINGTON NOISELESS PORTABLE.

ODELL

Cat. 41732, Neg. 415869.

Invented and patented in 1889 by Levi Judson Odell, and manufactured by Odell Typewriter Co., Lake Geneva, Wis. The first models had one row of keys, capitals and figures. The machine was later changed to a two-row (capitals and small letters) model, in which form it was produced by Farquhar & Albrecht of Chicago, and later by the Odell, and Odell-Young typewriter companies, Chicago. The factory was last in Momence, Ill. The inking was by means of an inkpad roller, located under the row of type.





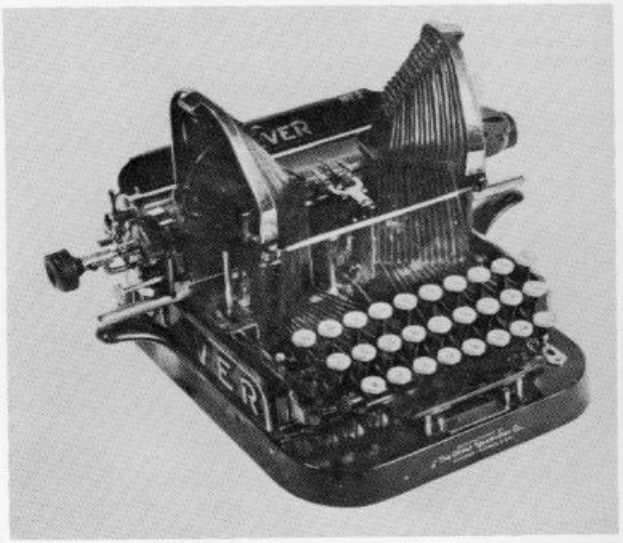
OLIVER

Cat. 41656, Neg. 415882.

Invented in 1896 by Reverend Thomas Oliver, a Methodist minister who spent his boyhood on a middle western Canadian farm. Experiments started in 1888, the first crude model being patented in 1892. In December, 1894, the first Model 1 machine was sold to another minister, who subjected it to hard use for ten years before he was willing to exchange it for a later model.

The OLIVER was entirely original in design, using a type-bar similar to an inverted "U," and having new features in the carriage mechanism. Production was begun on a large scale in 1896 by the Oliver Typewriter Co., Chicago, Ill., with great success. A new factory was later established at Woodstock, Ill.

A direct sale plan to customers by mail orders proved a failure, and the OLIVER as a competitor in the United States soon disappeared. In 1928 production was transferred to England, where it was discontinued in 1931.



OLIVER No. 2

Cat. 41654, Neg. 415984.

Produced in 1897 by the Oliver Typewriter Co., Chicago, Ill.

Models No. 3 (Cat. 40649, Neg. 415981), 5 (Cat. 40648, Neg. 415983), 7 (Cat. 41054, Neg. 415985), and 9 (Cat. 41655, Neg. 415986) were produced in 1902, 1907, 1914, and 1916, respectively.

OLIVER No. 11

Cat. 43092, Neg. 416131.

Produced in 1918 by the Oliver Typewriter Co., Chicago, Ill.

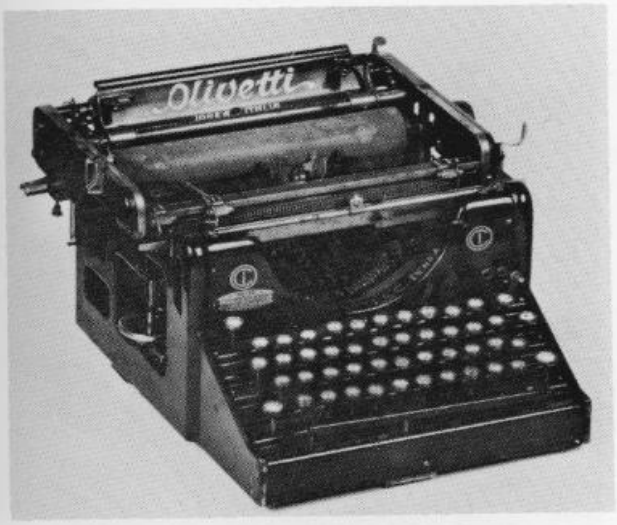
OLIVER PORTABLE

Cat. 45016, Neg. 418871.

After the demise of the Oliver Typewriter Co., of Chicago, Ill., in 1928, production of this machine was taken over by Oliver Typewriter Mfg. Co. Ltd., Croydon, Surrey, England, where the three-bank model was continued under the name of the BRITISH OLIVER until 1931, when production of the original OLIVER ceased.

Since then the name of OLIVER has been used by European manufacturers of the four-bank front-stroke machines, namely: in 1931 by J. P. Sauer & Son, of Suhl Thuringen, Germany, who also introduced the machine in France in 1932; in 1934 as the OLIVER 4-BANK, by the Oliver Typewriter Mfg. Co. Ltd., Croydon, England.

The OLIVER PORTABLE in the Museum collection was produced in 1930 in Italy by A. & C. Carish & Co. of Milano.



OLIVETTI (Italian)

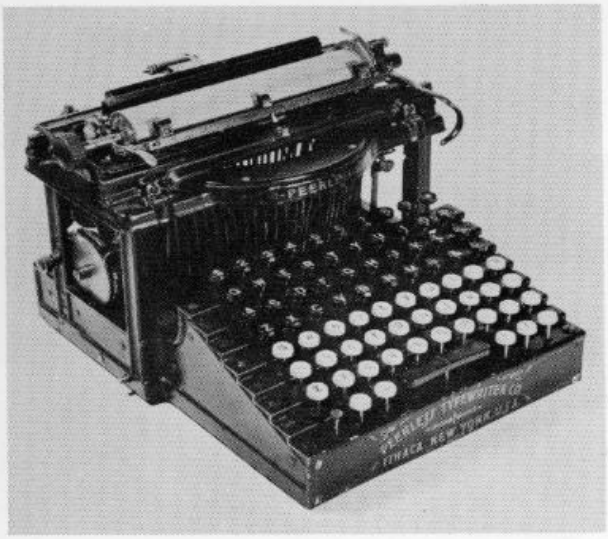
Cat. 42102, Neg. 416101.

This machine derived its name from its designer and producer, Camillo Olivetti, of Ivrea, Italy. Olivetti formerly lived in the United States where in 1896 he established a factory for producing electrical apparatus. In about 1900 he moved to Italy and in 1909 began construction of his typewriter, which was ready for market in 1911. It was a four-bank, single-shift, visible machine built on sound principles, and found a ready market in foreign countries.

ORGA-PRIVAT (German)

Cat. 47375, Neg. 423403.

Invented in 1923 by Paul Grutzman and manufactured by the Bing-Werke, Nuremberg, Germany. It was a four-bank, front-stroke, double-shift machine. As the name implies, it was built more for home than for business use.



PEERLESS

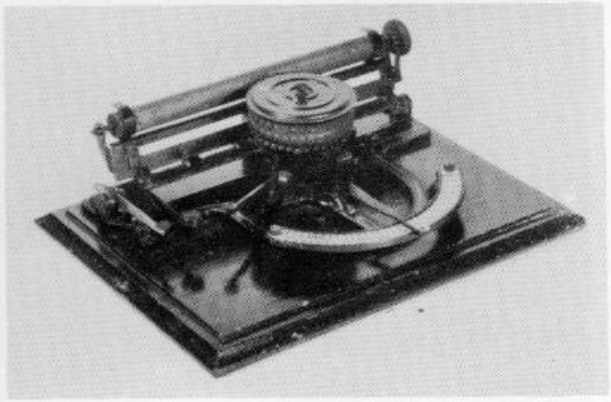
Cat. 40647, Neg. 415865.

A double-keyboard machine produced in 1911 by Leroy H. Smith, Dwight McIntyre, George Livermore, Charles M. Clinton, and James McNamara of Ithaca, N. Y., and manufactured by the Peerless Typewriter Co. of that city. Its similarity to the SMITH-PREMIER brought on a patent suit which lasted for years, and no doubt hastened its final demise. The machine had an easily removable platen.

PEIRCE ACCOUNTING

Cat. 43078, Neg. 416118.

Produced in 1912 by the Peirce Accounting Machine Co.



PEOPLES

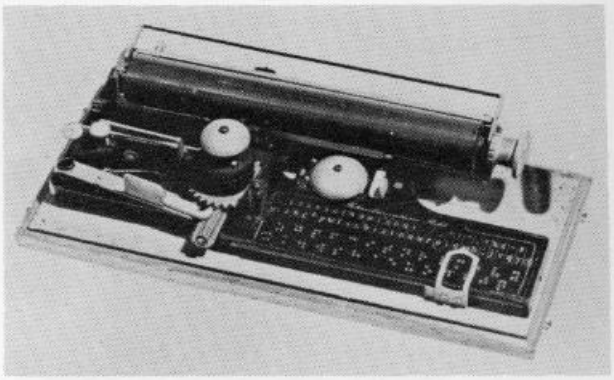
Cat. 41736, Neg. 415872.

Produced in 1893 by the Garvin Machine Co., New York, N. Y., it was one of the indicator type of machines. The type-wheel contained two rows of type. A shift key moved the type-wheel upwards to write capitals, while the small letters were on the ordinary level. The ribbon was loosely drawn around the type-wheel and shifted slightly with each action of this wheel. Later this machine was put out under the name of CHAMPION with the ribbon operated on two spools, a simple ratchet arrangement moving the ribbon from one spool to the other. Also put out under the name of PEARL.

PICHT (German)

Cat. 44222, Neg. 421077.

Produced in 1910, this was a typewriter for the blind, producing regular type impressions. The keyboard consisted of imperforations, permitting the blind operator to feel the desired letter or character. A type-wheel was used. Another model was also manufactured with regulation letters on the keyboard for the use of the general public, like other indicator-style machines. The inventor was Oscar Picht, former director of the Institute for the Blind, Berlin, Germany. It was manufactured by Herde Wendt, Berlin, Germany.



PITTSBURG

Cat. 40794, Neg. 415886.

An improvement over the former DAUGHERTY typewriter which it succeeded. Manufactured by the Pittsburg Writing Machine Co., Kittanning, Pa. An interchangeable carriage and type-basket, which permitted the use of different languages, was one of the features of this machine.

The first model of the PITTSBURG, like the DAUGHERTY, had a fan-shaped arrangement of type-bars. In the later models these were arranged in parallel position. The company went into receivership in July, 1913.

The PITTSBURG was later reproduced as the RELIANCE PREMIER, the RELIANCE, and the SHILLING. Production ceased in about 1921.

Models No. 10 (Cat. 41700, Neg. 416047) and No. 11 (Cat. 45021, Neg. 418869) were produced in 1902 and 1908, respectively.

PITTSBURG No. 12

Cat. 40799, Neg. 416052.

Produced in 1911 by the Pittsburg Writing Machine Co., Kittanning, Pa.

PORTEX No. 5

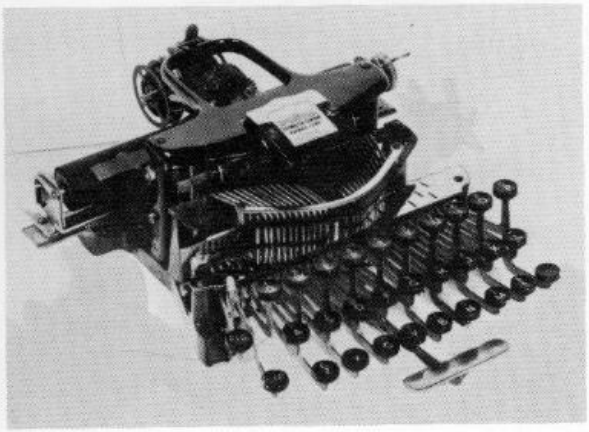
Cat. 40691, Neg. 416037.

The Rex Typewriter Co., of Fond du Lac, Wis., in 1917 produced the NATIONAL typewriter with some degree of success, its models being numbered 2, 3, 4, and 5. In 1922 Model 5 was issued under the name of PORTEX, being an abbreviation of Portable Rex. Being a three-bank machine, it failed to fill the requirements of the standard four-bank variety.

PORTO-RITE

Cat. 44473, Neg. 421173.

It is reported that this machine was made in about 1935 for one of the large mail-order houses by the Remington Typewriter Co., but inquiry has thus far not substantiated this. This model, the only one encountered, was secured by the donor in Glendale, California.



POSTAL

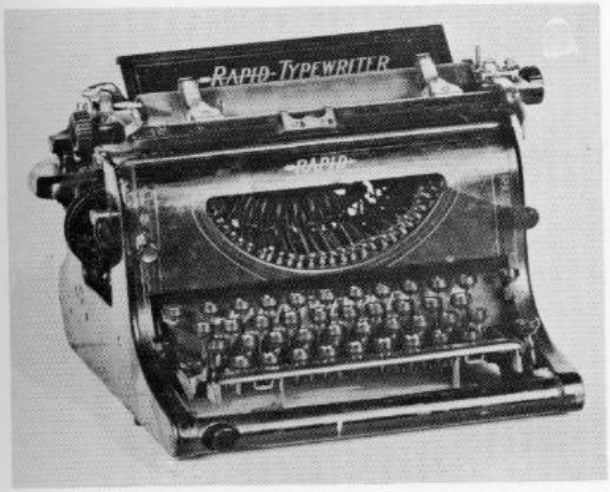
Cat. 40734, Neg. 415890.

Invented in 1902 by William P. Quentell and Franklin Judge, and manufactured by the Postal Typewriter Co., New York, N. Y., of which N. L. Carpenter was the prime mover. A type-wheel machine resembling the BLICKENSDERFER and COMMERCIAL VISIBLE, although differing from these in mechanical construction. The more practical front-stroke machines succeeded in crowding it off the market, with others of its type.

PULLMAN

Cat. 40672, Neg. 416022.

Produced in 1908 by the American Typewriter Company, Bridgeport, Conn. This machine was the successor to the AMERICAN which was first made in the Williams factory in Derby, Conn. It was also sold under the name MERCANTILE.



RAPID

Cat. 46509, Neg. 416141.

Produced in 1890 by Bernard Granville, Dayton, Ohio, and manufactured by A. W. Gump & Co. of that city. It employed the "forward-thrust" principle used in machines such as the FORD, WELLINGTON, and EMPIRE. The RAPID appeared five years earlier than any of its prototypes and was the forerunner of the forward-thrust mechanism later employed in the NOISELESS machines. Bernard Granville later produced the GRANVILLE AUTOMATIC typewriter in 1896.

RELIANCE PREMIER

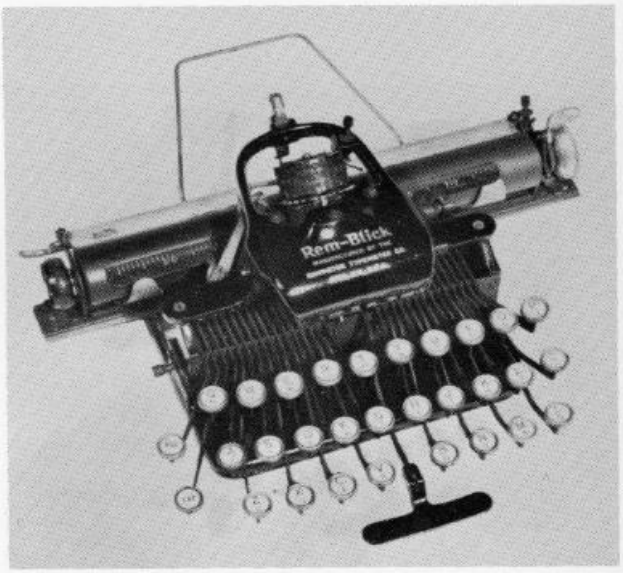
Cat. 40793, Neg. 416048.

Produced in 1917 by the Pittsburg Writing Machine Co., Kittanning, Pa.

RELIANCE VISIBLE

Cat. 41752, Neg. 416043.

Produced in 1915 by the Pittsburg Writing Machine Co., Kittanning, Pa. It was an improvement over the former DAUGHERTY. Also sold under the names PITTSBURG, AMERICAN, BECKER-BEACHLER, and RELIANCE PREMIER.



REM-BLICK

Cat. 49330, Neg. 425198.

Produced in 1928 by the Remington Typewriter Co. This machine was formerly manufactured and sold by the Blickensderfer Mfg. Co., of Stamford, Conn., under the name BLICKENSDERFER No. 9.

REMINGTON No. 1

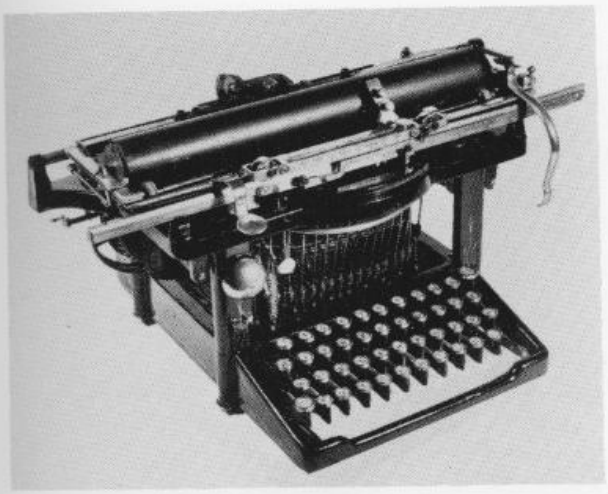
Cat. 41630, Neg. 415851.

This machine was the same as the last model made by the Remingtons under the name SHOLES & GLIDDEN (see under that name). The name REMINGTON was used in 1878 and thereafter.

REMINGTON No. 2

Cat. 40658, Neg. 415938.

Manufactured in 1878, this was the first typewriter fitted with a shift-key and having upper and lower case type on the same type-bar. Based on the principles of the Sholes and Glidden invention, this machine corrected the weaknesses and imperfections of the preceding models.



REMINGTON No. 3

Cat. 41790, Neg. 415934B.

Produced in 1879.

REMINGTON No. 4

Cat. 47965, Neg. 423958.

Produced in 1880.

REMINGTON No. 6

Cat. 40659, Neg. 415935.

Produced in 1894 for the American and English market.

REMINGTON No. 7

Cat. 40680, Neg. 415939.

Produced in 1896. This was a light-weight machine.

REMINGTON No. 8 (Yiddish)

Cat. 40736, Neg. 415940.

Manufactured in 1897, this machine was fitted with Yiddish characters and letters and was provided with a carriage which moved from left to right to accommodate the Yiddish method of writing.

REMINGTON No. 9 (Greek)

Cat. 41789, Neg. 415936.

Produced in 1909.

REMINGTON No. 10

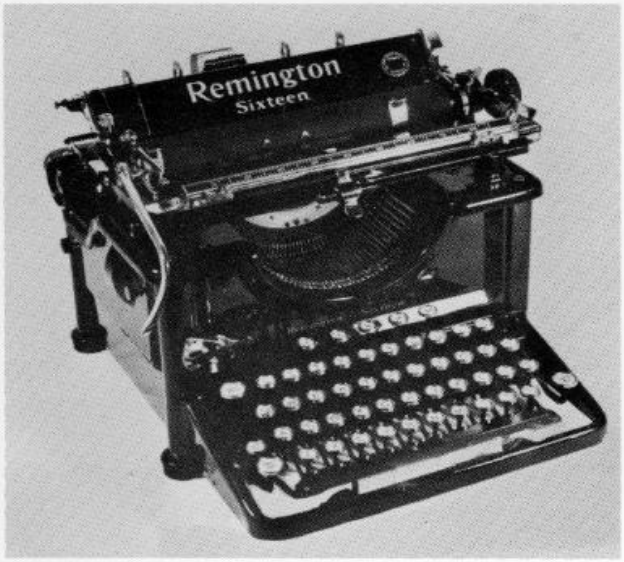
Cat. 45017, Neg. 416146.

Through good advertising, the REMINGTON (blind) machine maintained its position among typewriters in spite of the competition of the visible writing front-stroke machines, which for some twelve years before the REMINGTON brought out its visible machine had been giving it the keenest competition. Finally, however, it became apparent that "blind writing" had taken its position in the past of typewriter history, and the new REMINGTON VISIBLE No. 10 supplanted the series of writing machines which had charted the path of machine writing from its beginning.

REMINGTON No. 11

Cat. 40896, Neg. 415937.

Produced in 1935, this model differed in many ways from an original Model No. 11 (1911). The type was pulled against the platen instead of being thrust.



REMINGTON No. 16
Cat. 40693, Neg. 415941.
Produced in 1932.

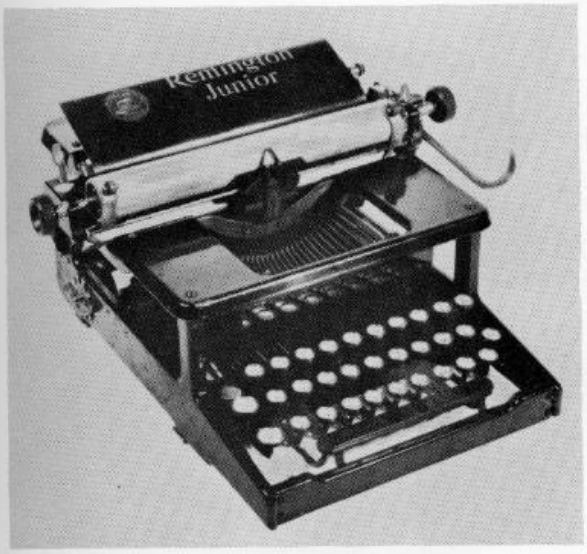
REMINGTON No. 17
Cat. 48422, Neg. 424230.
Produced in 1939.

REMINGTON-BANTAM
Cat. 48424, Neg. 424227.
Produced in 1932 by the Remington Rand Co.

REMINGTON ELECTRIC

Cat. 42137, Neg. 416106.

Produced in 1925 by the International Business Machines Corporation, Rochester, N. Y. It was made for the Remington Co.



REMINGTON JR.

Cat. 41650, Neg. 415922.

In an attempt to meet the competition of the many incoming smaller, portable typewriters, the Remington Typewriter Company produced this medium sized machine, a three-bank, front-stroke, visible writer, manufactured in the factory of the SMITH-PREMIER in Syracuse, N. Y. Its sale was not very marked and it disappeared with the introduction of the more perfect portables produced by the same company.

REMINGTON NOISELESS

Cat. 40694, Neg. 415945.

Produced in 1925 by the Remington Noiseless Corporation, Middletown, Conn.

REMINGTON REM-ETTE

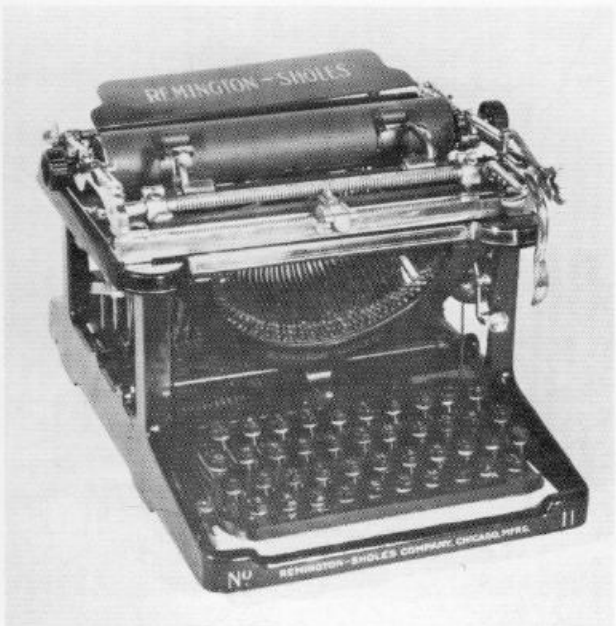
Cat. 48423, Neg. 424228.

Produced in 1938 by Remington Rand.

REMINGTON SCOUT

Cat. 48425, Neg. 424229.

Produced in 1924.



REMINGTON-SHOLES VISIBLE

Cat. 42136, Neg. 416093.

Produced in 1905, this was the last machine put out by the makers of the REMINGTON-SHOLES, the REM-SHO, and FAY-SHO. It had the standard four-bank keyboard, with single shift, and claimed an exceptionally powerful stroke of the type-bars, resulting in good manifolding, a very light touch, and other advantages. The inventor was Zalmon G. Sholes, son of Christopher Latham Sholes. The factory was located in Chicago, Ill. On January 22, 1909, due to financial difficulties, a receiver was appointed who sold the entire equipment of the Remington-Sholes Visible factory to Japy Freres & Co., of Beaucourt, France, where the same machines with some improvements were thereafter produced as the JAPY. Zalmon Sholes later produced the ZALSHO typewriter in England.

REM-SHO

Cat. 18968, Neg. 415871.

Invented in 1893 by Zalmon G. Sholes, a son of C. Latham Sholes. In 1893, Zalmon G. Sholes formed a partnership with Franklin Remington, a son of the original Remingtons who started the manufacture of the REMINGTON typewriter. The first REM-SHO machines appeared in 1896, from the factory in Chicago. Although resembling the REMINGTON, the REM-SHO had a number of inovations of its own.

As the result of litigation brought by the original Remingtons, the court orderad the removal of the name "Remington," and the company substituted the name FAY, C. N. Fay being the president of the company. The machine was thereafter known as the FAY-SHO. Zalmon G. Sholes later (March, 1911) invented the ACME typewriter, a visible machine first put out under the name WATERBURY, with factory at Waterbury, Conn. This failing, Sholes went to London, England, where he interested the Lawrence Mfg. Co., which brought out the ZALSHO typewriter in January, 1913. An attempt was made about July, 1915 to produce the Z. G. Sholes typewriter in Wilmington, Del., without success. Zalmon G. Sholes died on Oct. 9, 1917.

Model No. 5 (Cat. 41683, Neg. 416032) was produced also in 1893.

REM-SHO No. 6

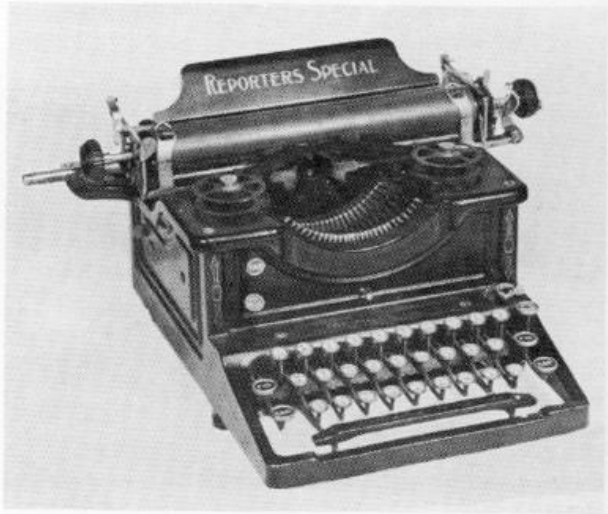
Cat. 41684, Neg. 416033.

Produced in 1900.

REPORTERS SPECIAL

Cat. 48943, Neg. 424883.

A three-bank visible machine invented by D. C. Harris and produced in 1914 by the Rex Typewriter Co., Fond du Lac, Wisconsin. It also sold under the names AUTOCRAT, HARRIS, REX DEMOUNTABLE, and REX VISIBLE.



ROBERTS-NINETY

Cat. 46512, Neg. 420583.

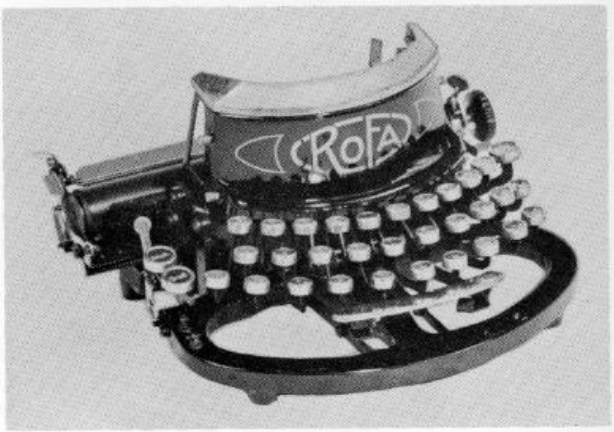
This three-bank, double-shift machine first appeared in 1919 as the BLICK-NINETY, being manufactured by the Blix Typewriter Co., Stamford, Conn. On the death of the inventor, Lymann R. Roberts, in 1921, the Roberts Typewriter Co., of Stamford, succeeded to the business and changed the name of the machine to ROBERTS-NINETY, carrying on until 1924, when production was discontinued.

ROFA (German)

Cat. 42305, Neg. 416133.

Produced in 1921, this visible writing machine derives its name from its producer Robert Fabig, of neu-Ruppin, Germany. Instead of using a ribbon, inking was done by means of a felt roller. The semi-circular keyboard was not conducive to the speed required in modern writing machines. Production was discontinued in 1929.

The same machine was produced for the trade in Holland under the name of CORRESPONDENT.



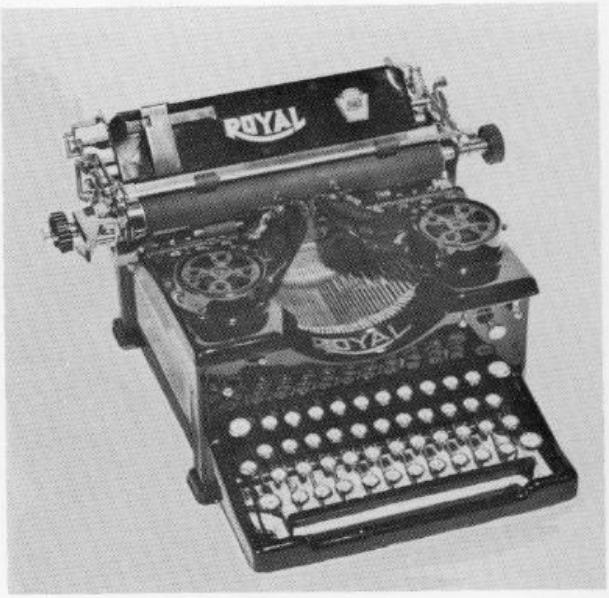
ROYAL

Cat. 40654, Neg. 415894.

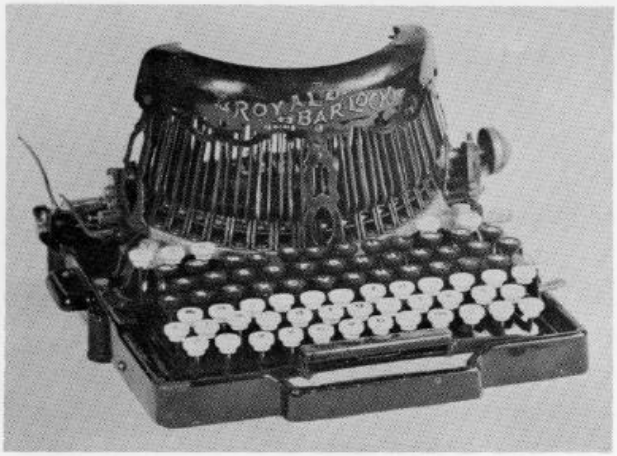
Invented in 1906 by E. B. Hess, it quickly forged its way upwards to become one of the leaders in the typewriter field. The first machines were known as the "flat-bed" style, because of the low lines of construction. In 1914 the low lines were changed to the standard, higher construction, which has since been maintained. "Touch control," enabling the operator to set the type-bar tension to suit the convenience of the operator, is one of the latest features of the ROYAL. About twenty exclusive Hess-patented features are used in its manufacture. Produced by the Royal Typewriter Co., in the factory located at Hartford, Conn.

ROYAL No. 5
Cat. 45895, Neg. 418887.
Produced in 1911.

ROYAL
Cat. 42062, Neg. 416082.
Produced in 1932 by the Royal Typewriter Co., Hartford, Conn. The first ROYAL equipped with ball-bearings.



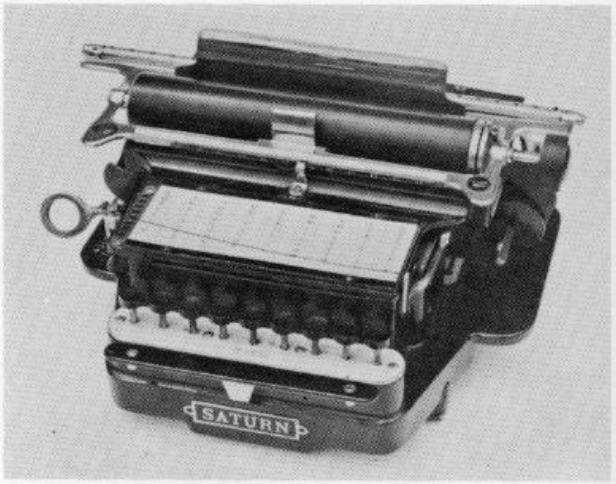
ROYAL No. 10
Cat. 45584, Neg. 418876.
Produced in 1914 by the Royal Typewriter Co., Hartford, Conn.



ROYAL BAR-LOCK (English)

Cat. 47374, Neg. 423404.

Invented in 1888 by Charles Spiro, New York, N. Y. It was the successor to the COLUMBIA-BAR-LOCK and was produced by Columbia Typewriter Co., New York, N. Y., for sale in England.



SATURN (Swiss)

Cat. 44041, Neg. 422496.

Invented in 1899 by Fr. Meyer-teuber and made in the machine shop of E. Stauder in Meilen, near Zurich, Switzerland. This Swiss machine was entirely original in that it was neither a type-bar machine nor one using a type-wheel. Only about three hundred were made.

SECOR

Cat. 41714, Neg. 415895.

Invented in 1905 by Jerome B. Secor, who had spent many years in the Williams typewriter factory. This was a standard four-bank, single-shift, front-stroke machine. While it had some meritorious features, it is said to have had too many parts to make it a practical product. The producer was the Secor Typewriting Co., Derby, Conn., occupying the old Williams factory. The company made about 7,000 machines previous to its failure.

SENTA (German)

Cat. 44474, Neg. 421174.

Produced in 1914, this portable first appeared as a three-bank, double-shift, front-stroke machine, which in 1930 was changed to the standard four-bank, single-shift variety. It was manufactured by Frister and Rossmann, Berlin, Germany, who in 1892 produced the FRISTER & ROSSMANN typewriter, the first of the European typewriters which was commercially practicable. Also known as PRESTO and BALKAN. Production of the SENTA was discontinued in 1930.

SHILLING

Cat. 41774, Neg. 416053.

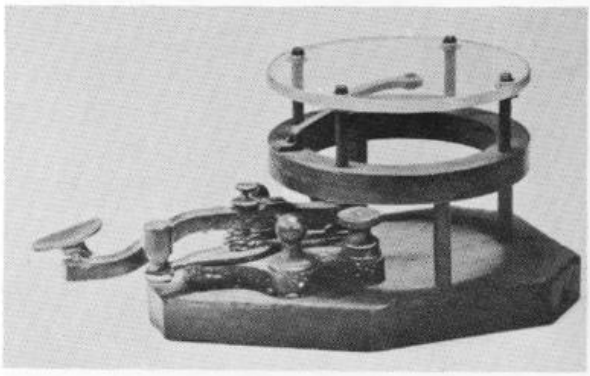
In 1921 the last effort to revive the PITTSBURG-VISIBLE was made by Shilling Brothers of Pittsburgh, Pa., owners of the Fort Pitt Typewriter Co., who had acquired the assets of the fast failing Pittsburg Typewriter Co. Under the name of FORT-PITT, and finally SHILLING, they marketed the machine for a year or two against insurmountable odds. While a fair machine mechanically, it did not measure up to the fine precision developments of its competitors. It was at that time that the number of successful typewriters was rapidly narrowing down to the present survivors.

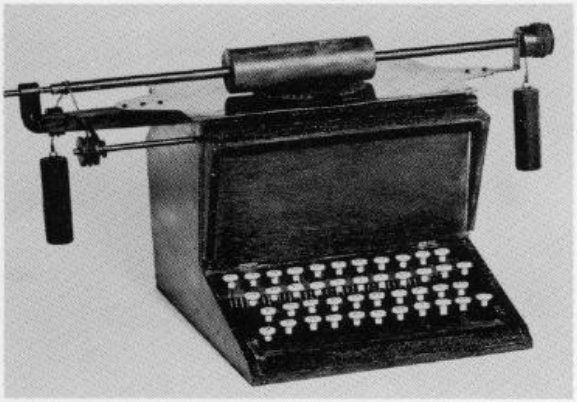
SHOLES EXPERIMENTAL KEYBOARD

Cat. 28927, Neg. 420580.

Sometime during the month of July, 1867, C. Latham Sholes showed to some friends of his a little machine that would print letters on a movable strip of paper with the aid of a sheet of carbon paper. This little piece of mechanism, consisting of a block of pine, shaped with a jackknife, a piece of glass, and a telegraph key, would print one letter whenever the key was struck.

On July 14, 1868, a patent on this mechanism was granted to C. Latham Sholes, Carlos Glidden, and Samuel W. Soule of Milwaukee.





SHOLES MODEL

Cat. 43076, Neg. 416117.

Exact reproduction of the original SHOLES model sold to the Remington Co. in 1873.

SHOLES & GLIDDEN
Patent Model

Cat. 41870, Neg. 421272.

The working model, made by Sholes and Glidden in Milwaukee in 1873, was taken by James Densmore and George Washington Yost to E. Remington and Sons at Ilion, N. Y., to demonstrate the practicability of the Sholes & Glidden typewriter. As a result of the demonstration, the Remingtons purchased the patent, March 1, 1873. The original is in the possession of Remington Rand, Inc., New York, N. Y. An exact replica is in the Milwaukee Public Museum.

The Remingtons had been manufacturing sewing machines, farm implements, and firearms, and within about seven months after the purchase of the typewriter patent, their superintendent, Wm. K. Jenne, converted the crude model into a marketable machine. The first machines were sold in 1874.

SHOLES & GLIDDEN

Cat. 41630, Neg. 451877A.

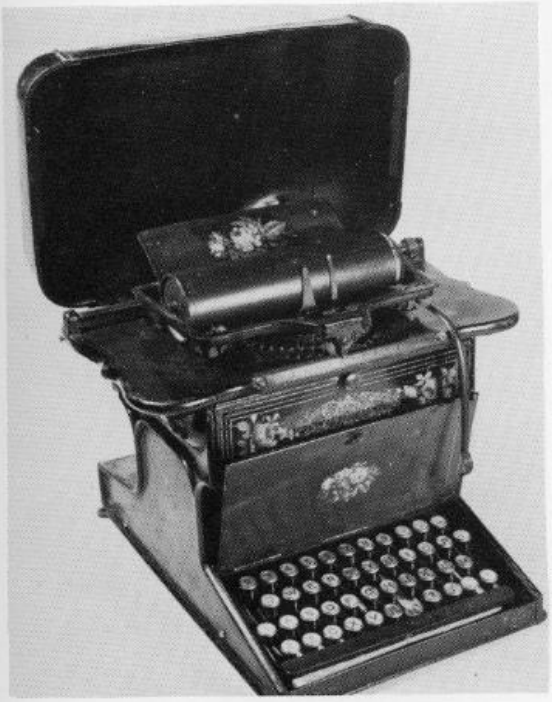
This was the first practical typewriter, produced during 1867-1874 by Christopher Latham Sholes and Carlos Glidden. Patent dated July 14, 1868; patent No. 79868. The patent was sold March 1, 1873 to E. Remington & Sons, of Ilion, N. Y. The first commercial machines were completed early in 1874 and were soid mounted on sewing machine stands. Until 1878 the machines wrote only capital letters.

SHOLES & GLIDDEN

Cat. 41793, Neg. 415876.

This was the second model made by E. Remington & Sons. It differed from the first in that a hand lever was provided for revolving the platen and returning the carriage, replacing the foot lever.

Until the name of the machine was changed to the REMINGTON, about 1877, the prevailing label was: SHOLES & GLIDDEN TYPEWRITER, manufactured by E. Remington & Sons, Ilion, N. Y.



SHOLES & GLIDDEN

Cat. 41871, Neg. 415875.

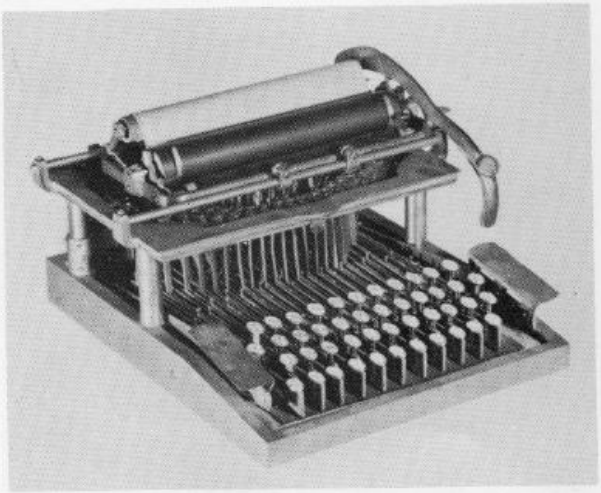
Produced in 1877, this third model introduced a simpler hand lever for revolving the platen and returning the carriage.

The elaborate decorations on these models were to make the machines attractive to the eye. The first catalogs described them as "an ornament to any parlor."

SHOLES WORKING MODEL

Cat. 44807, Neg. 424744.

Replica, duplicate of original, built in the Milwaukee Public Museum.



SHOLES & GLIDDEN

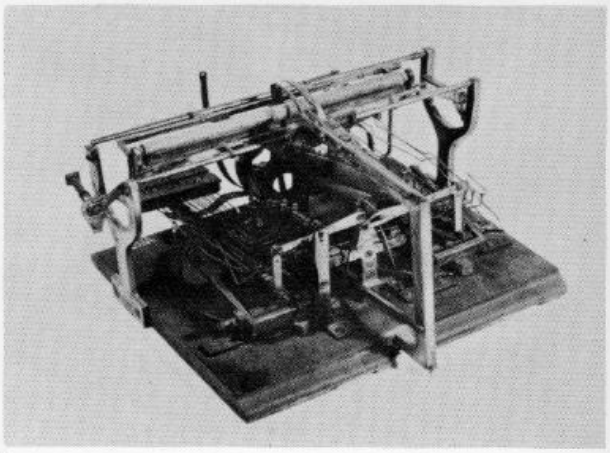
Cat. 40682, Neg. 415973.

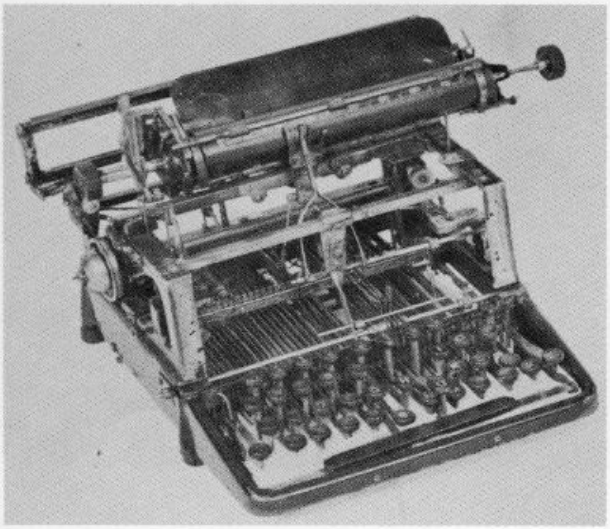
Produced in 1877, this undecorated machine embodied a new method of hanging the type-bars, which can readily be seen by comparing the type-bar circles with those in the previous models.

SHOLES EXPERIMENTAL MODEL

Cat. 41755, Neg. 415926.

After Mr. Sholes had produced the SHOLES & GLIDDEN, later the REMINGTON typewriter, he continued experimenting with writing machines. One of these, representing his last completed effort, the SHOLES-VISIBLE was placed on the market in 1901, ten years after his death. This model shows that Mr. Sholes was trying to work out machines which would write from wheels or semi-wheels, as it was argued at the time that it was impossible to keep type-bar machines in alignment, and that only the fixing of type on one common frame or wheel would cure this deficiency. In letters written by Mr. Sholes, he repeatedly referred to the question of securing permanent alignment.





SHOLES WORKING MODEL

Cat. 45704, Neg. 418883.

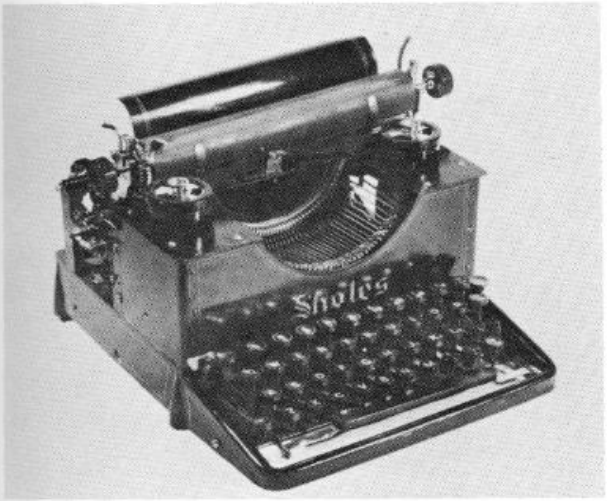
SHOLES VISIBLE

Cat. 41679, Neg. 415889.

This was the last inventive effort of Christopher Latham Sholes. It was equipped with an entirely original type-bar mechanism. The type-bars were arranged in two rows at the front of the machine. When the type-key was struck, the corresponding type-bar moved out of its position to the space between the type-rows, and then moved towards the platen, making the impression, and returned to its position in the type-row.

The SHOLES VISIBLE used the standard keyboard, with no shift, and achieved visible writing. The type-bar action, although original, was not as fast as the front-stroke action now in use, and hence the machine was unable to maintain its position among its competitors.

Louis Sholes, eldest son of C. Latham Sholes, after the death of his father (Feb. 17, 1890) took over the manufacture of this machine in the A. D. Meiselbach Typewriter Co., Kenosha, Wisconsin, during 1901 to 1905. Although some have called this machine the MEISELBACH, none were put out under that label. In 1909 Louis Sholes organized the C. Latham Sholes Typewriter Co., in Milwaukee, Wis., in an effort to again produce the SHOLES VISIBLE, but without success.



SHOLES, LOUIS (Model)

Cat. 40802, Neg. 416014.

Built by Louis Sholes, son of Christopher Latham Sholes.

SHOLES (Zalmon G.)

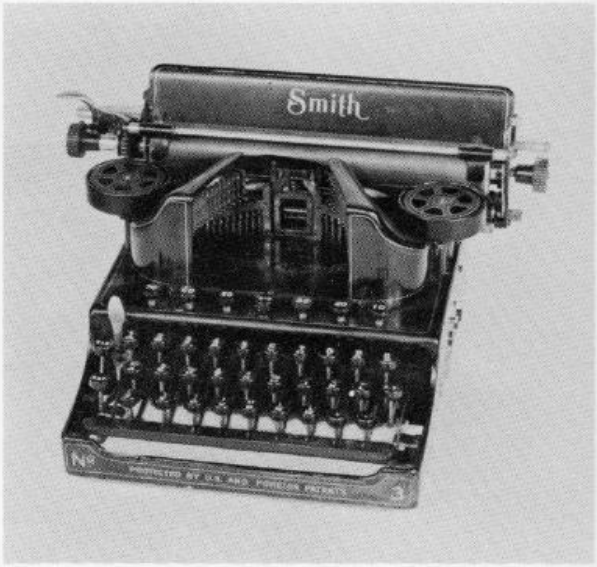
Cat. 41678, Neg. 416013.

In 1911 Zalmon G. Sholes, who had already produced the REMINGTON-SHOLES, REM-SHO, FAY-SHO, and REMINGTON-SHOLES VISIBLE, developed a later model four-bank, front-stroke, visible writing machine which he named the WATERBURY STANDARD VISIBLE, produced by the Sholes Typewriter Co., Waterbury, Conn. Shortly after its release, the name was changed to ACME. Failing to succeed, Sholes went to London, England, in 1913, interested English capital, and his new machine was produced by the Lawrence Mfg. Co., London, under the name of ZALSHO. Due to the interference caused by the world war, the new project soon failed. In 1915 Sholes returned to America and, at Wilmington, Del., established a plant for production. On the death of Zalmon G. Sholes, Oct. 9, 1917, further activities of the company ceased.

SHORTWRITER

Cat. 44229, Neg. 421079.

Produced in 1914 by the Shortwriter Co., Chicago, Ill. This machine was used for phonetic writing.



SMITH (Emerson)

Cat. 42107, Neg. 416102.

This was an EMERSON which had been relabeled SMITH by Harry A. Smith, who in a number of instances took over the reins of defunct typewriter plants and then put out the machines under his own name.

SMITH, HARRY A.

Cat. 23692, Neg. 416056.

Invented in 1913 by Emmet G. Latta, Syracuse, N. Y. It was first named the MOYER, after Harry A. Moyer of Syracuse who had furnished the finances for its development. In 1913 the Blickensderfer Mfg. Co., Stamford, Conn., which had produced the BLICKENSDERFER, used this machine, under the name of BLICK-BAR, for its entry into the field of front-stroke, visible writing machines. It was a machine of simple construction with ball-bearings on typebars and carriage. In 1917 the manufacture of this machine was taken over by Harry A. Smith, who had produced it under his own name, at Elkhart, Indiana.

SMITH, L. C. and BROTHERS

Cat. 46733, Neg. 423414.

Invented in 1904 by Carl Gabrielson, Springfield, Mass., who endeavored to interest the directors of the Smith-Premier Typewriter Co. in its production. Failing to secure their interest, four brothers: Lyman C., Wilbert L., Monroe C., and Hurlbut Smith, severed their connection with the Smith-Premier Co. and organized the L. C. Smith and Brothers Typewriter Co., Syracuse, N. Y., to produce Gabrielson's machine.

Some of the features of the Smith machine were the shifting of the type segment (or basket) instead of the carriage, ball bearings throughout, and interchangeable platens.

This machine represents one of the outstanding successes in typewriter manufacture.

SMITH-PREMIER

Cat. 40653, Neg. 415860.

Invented in 1888 by Alexander Timothy Brown. Manufactured by the Smith-Premier Typewriter Co., Syracuse, N. Y. Strength, durability, light touch, and speed were its outstanding features. It enjoyed an extensive world sale until later improvements replaced it.

Model 2 (Cat. 40652, Neg. 415946) was produced in 1895.

SMITH-PREMIER No. 3

Cat. 41764, Neg. 415947.

Produced in 1895 by the Smith-Premier Typewriter Co., Syracuse, N. Y. The length of the platen was increased on this machine.

SMITH-PREMIER No. 4

Cat. 41024, Neg. 415948.

Produced in 1896 by the Smith-Premier Typewriter Co., Syracuse, N. Y. The length of the platen was shortened on this machine.

Model No. 5 (Cat. 42260, Neg. 416114), was produced in 1900.

SMITH-PREMIER VISIBLE

Cat. 40651, Neg. 415900.

In 1908, following closely on the heels of the change in the REMINGTON from the blind-writing to the "visible" principle, the SMITH-PREMIER was next to adopt the new method. The double keyboard was retained, however, and while the new SMITH-PREMIER was well constructed, the speed required in modern business correspondence called for the more rapid single keyboard with its "shift" from upper to lower case.

SMITH-PREMIER No. 30

Cat. 48673, Neg. 424619.

Produced in 1923, it was the successor to the MONARCH.

SMITH-VISIBLE

Cat. 47542, Neg. 423442.

On June 17, 1909, the assets of the YETMAN Typewriter Transmitter Co., New York, were sold at auction to J. L. Smith of Philadelphia, Pa., and under his direction, the SMITH-VISIBLE was placed on the market. It reached a very limited market.

STANDARD FOLDING

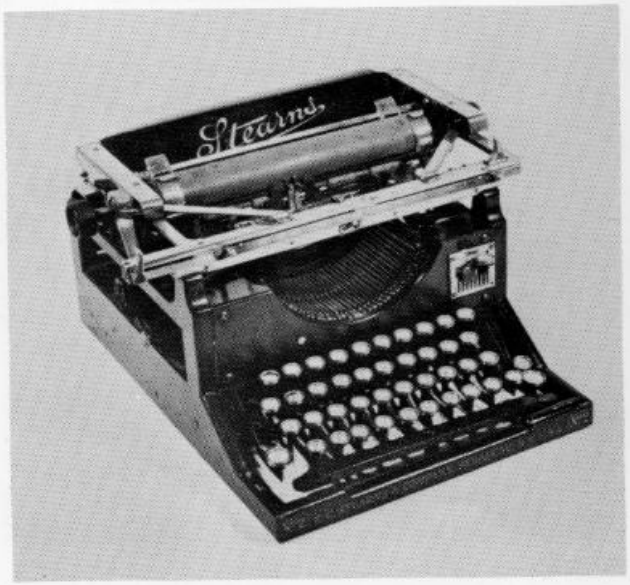
Cat. 40795, Neg. 415899.

The first machine to use the folding idea for compactness, and the bent sheet metal in the frame construction for lightness. The invention of Frank S. Rose, New York, N. Y., who began his experiments in 1902. On his death in 1905, a son, George F. Rose, continued the development of the idea and brought it to its conclusion in 1907, when the first machines were placed on sale. Though small, it was described as "The Standard Folding Type-Bar Visible Writing Typewriter," and from the first met with success. Originally produced by Rose Typewriter Co., New York, until 1909, when the name was changed to Standard Typewriter Co. Soon thereafter the plant was moved to Groton, N. Y. In 1912, the name was changed to CORONA, and in 1914 the name of the company was again changed to Corona Typewriter Co., Inc.

STEARNS

Cat. 40667, Neg. 415902.

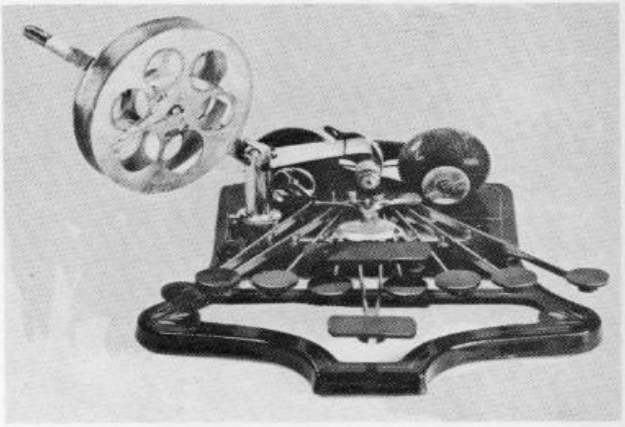
E. C. Stearns & Co., Syracuse, N. Y., who manufactured the Stearns bicycle, took over the invention of J. E. Thomas and August Schneeloch of New York, N. Y., in 1905, and in 1908 offered the first STEARNS typewriter to the public. It was a front-stroke, entirely visible, standard four-row-keyboard machine with single shift. For ten or twelve years it enjoyed a fair sale.



STEARNS No. 4

Cat. 42048, Neg. 416092.

Produced in 1908 by E. C. Stearns & Co., N. Y. The length of the platen was increased on this machine.



STENOGRAPH

Cat. 45893, Neg. 423425.

A shorthand writing machine, manufactured in 1889 by the United States Stenograph Co., St. Louis, Mo.

STENOTYPE

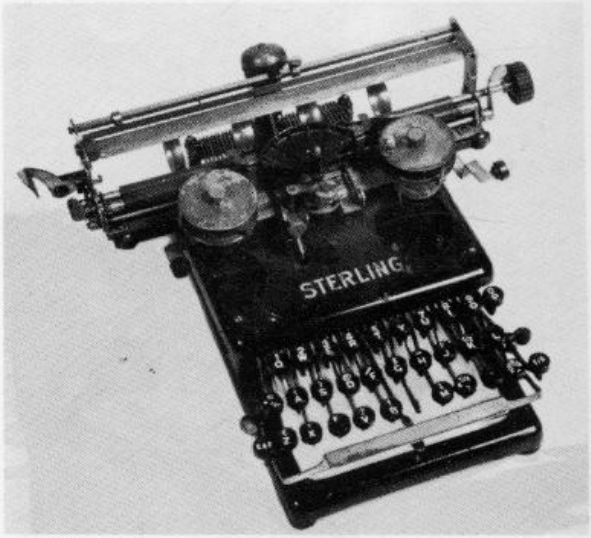
Cat. 41748, Neg. 415966.

Invented in 1911 by Ward S. Ireland, Dallas, Tex. It was manufactured by the Stenotype Co., Indianapolis, and later Owensboro, Ky. It was a shorthand writing machine for which the thumbs were used for writing vowels, the fingers of the left hand for writing consonants, and the fingers of the right hand for writing final consonants.

STERLING

Cat. 49331, Neg. 425184.

Invented in 1910 by C. J. Paulson and produced by the Sterling Typewriter Co., New York, N. Y. This machine used a partial wheel or shuttle on which the types were cast. Production was discontinued in 1913.



STOEWER RECORD (German)

Cat. 43083, Neg. 416119A.

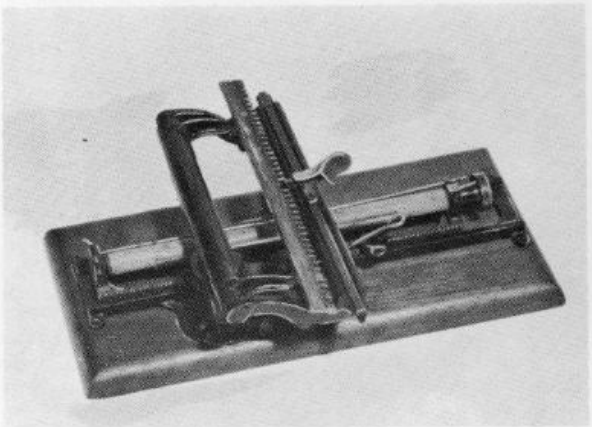
The original STOEWER appeared in 1903 as a standard, visible, single-shift, four-bank machine. Since 1909, it is known as STOEWER-RECORD. It was also marketed under the following names: BAKA, LLOYD, CITO, BARRATT, SWIFT, and SWIFT-RECORD. In 1930 financial difficulties caused the liquidation of the producing company, the Bernhard Stoewer Corp., Stettin-Grunhof, Germany, which since 1857 had been engaged in the manufacture of sewing machines and bicycles.

The business was taken over by the Rheinmetall Machine Company of Sommerda, Germany, which has since produced the typewriter under the name of RHEINMETALL.

SUN

Cat. 45578, Neg. 418881.

Invented in 1885 by Lee S. Burridge, New York, N. Y. This original sliding-type-bar machine was much superior to many other low-priced typewriters. Other machines which literally copied its mechanism were later produced, such as the ODELL, INTERNATIONAL, and NEW AMERICAN. The types were cast on a metal bar, which was moved from side to side bringing the desired type into place. Depressing the type-bar by means of a finger lever made the written impression. Inking of the type was accomplished by means of a small felt roller supplied with ink.



SUN No. 2

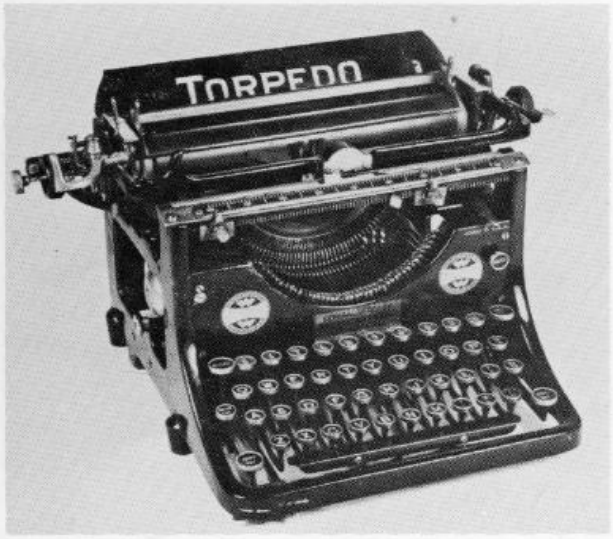
Cat. 41667, Neg. 415888.

Invented in 1901 by Lee S. Burridge and produced by the Sun Typewriter Co., New York, N. Y. This was a semi-portable, front-stroke typewriter, the first of this kind to be sold at a low price ($40.00). Instead of a ribbon, a revolving felt ink-pad made possible printing directly from the type, resulting in clear impressions. The success of this small model resulted in the production of larger models for office use. In all, nine models were made. In Germany, it was produced under the names STAR, NOVA, CARLEM, and LEFRAMA.

TITANIA (German)

Cat. 47973, Neg. 423966.

Invented in 1910 by E. Schliepkack. This is said to be the first German typewriter using ball-bearings in its type-bars, which are said to be self-centering and capable of attaining a perfect alignment in writing. First manufactured by Mix & Genest, Berlin, and since 1918 by Titania Typewriter Corporation, Berlin, Germany. Production is said to have ceased in 1925. This machine was of the standard, front-stroke, four-bank, visible variety.



TORPEDO (German)

Cat. 46182, Neg. 421946.

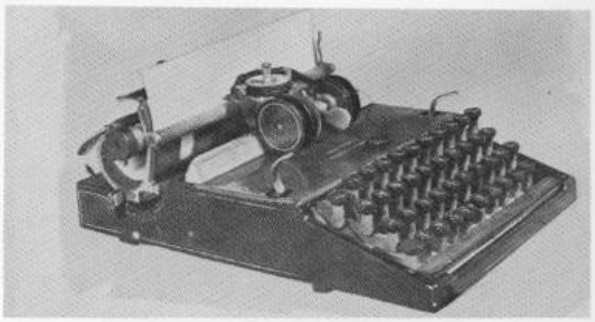
Produced in 1907. When the manufacture of the HASSIA typewriter (1904) was discontinued, the patent rights and equipment of its manufacturer were acquired by Peter Weil & Co., Frankfurt-am-Main, Germany. The machine was redesigned and new features incorporated, so that when the new machine was offered the public, under the name TORPEDO, it was recognized as comparable with any of the better typewriters on the market. It was a four-bank, front-stroke, single-shift, standard-keyboard machine. Peter Weil & Co. is now known as Weilwerke Corporation.

This machine was also known as REGENT, TORPEDO-SIMPLEX, and UNITYPE.

TRAVIS

Cat. 41728, Neg. 415932B.

This wheel-type machine of original mechanical construction was produced in 1905 by the Travis Typewriter Co., Philadelphia, Pa. Its sales extended hardly beyond the limits of the city of its origin, and it enjoyed a life of about six months.



TRIUMPH (German)

Cat. 47962, Neg. 423955.

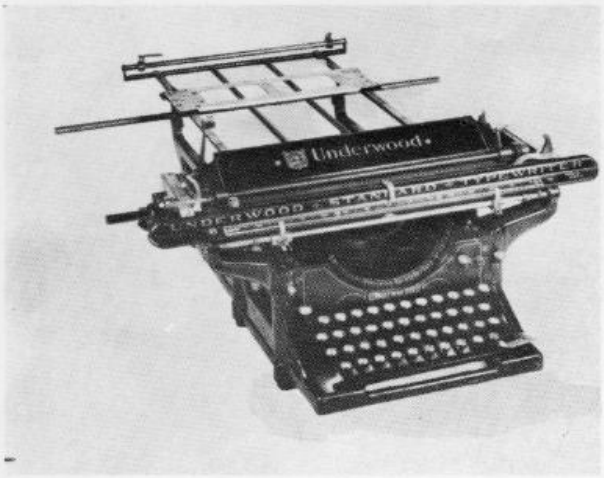
Produced in 1910, it was a standard, front-stroke, single-shift, four-bank, visible machine, manufactured by the Triumph-Werke Corporation, Nurnberg, Germany, who had acquired the equipment and assets of the Triumph Cycle Works Ltd., Coventry, England, the producers of the NORICA typewriter.

Also known as ADLER-STANDARD, EDITA, KOHINOOR, PHOENIX, MONDIALE, and TRIUMPH-SIMPLEX.

UNDERWOOD

Cat. 41697, Neg. 415885.

Invented in 1898 by Franz X. Wagner who had previously cooperated with George Washington Yost in producing first the CALIGRAPH, then the YOST, and later the DENSMORE typewriters. Wagner's first experience with typewriters was in the REMINGTON factory. Seeing a BAR-LOCK typewriter in which the type-bars stood erect, Wagner tilted the machine towards himself and conceived the idea of the front-stroke action; although the front-stroke principle had already been employed in the DAUGHERTY. Wagner worked out the principle of the type-bar action now employed in the UNDERWOOD, and secured his patent on April 27, 1893. A period of experimental work followed and the Wagner Typewriter Co. was formed. Later John T. Underwood, who had been engaged in the ribbon and carbon paper business, purchased the Wagner patent and business and incorporated the Underwood Typewriter Company in 1895. Offices and factory were opened in New York. In 1896, the plant was moved to Bayonne, N. J., and in 1899 was again moved to Hartford, Conn. The executive offices remained in New York.



UNDERWOOD FANFOLD

Cat. 44845, Neg. 421949.

Produced in 1926, this extension on the back of the UNDERWOOD typewriter served as a means of handling long sheets of billing stationery with carbon paper between, folded fan-like, thus enabling the operator to continue successively the writing of such forms as invoices, without the necessity of inserting each set of original and duplicate copies individually.

UNDERWOOD PORTABLE

Cat. 43967, Neg. 416063.

Produced in 1919 by the Underwood Typewriter Co. It first appeared as a three-bank machine with double-shift, and was succeeded in 1923 by the four-bank, single-shift model.

UNDERWOOD SOUNDPROOF

Cat. 13860, Neg. 421391.

Produced in 1910, this cover was devised to deaden the noise produced by the striking of the type on the platen. It could be raised with ease for the purpose of inserting paper, erasures, etc., and, no doubt, accomplished the purpose in mind; it was soon named "the coffin." This, together with the fact that it was rather an impediment in the operation of the typewriter, no doubt led to its discontinuance.

UNDERWOOD STANDARD BOOKKEEPING MACHINE

Cat. 46556, Neg. 420662.

Introduced by the Underwood Typewriter Co., in 1912, to combine various requirements of a typewriter and calculating machine.

VARITYPER

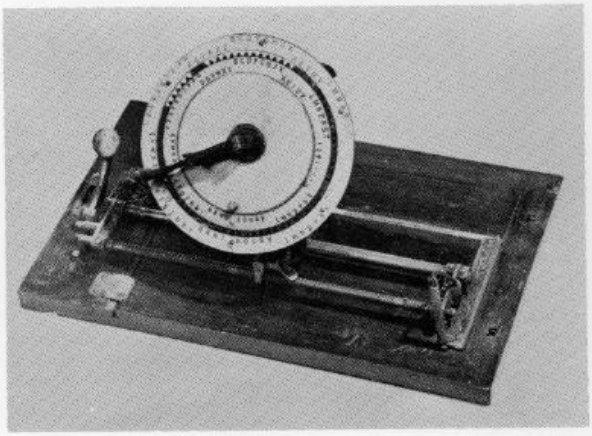
Cat. 44480, Neg. 421179.

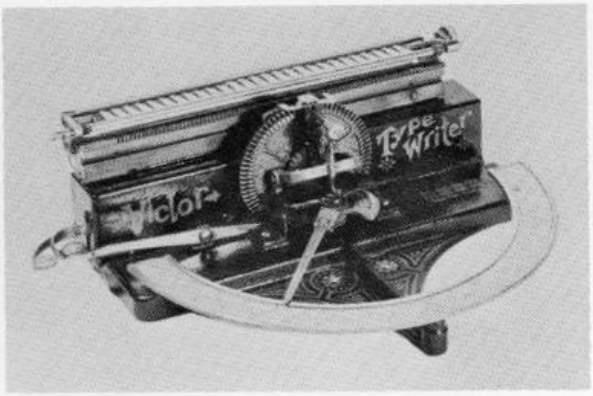
This was a continuation of the HAMMOND. Because of the easy interchangeability of the type segments, the VARITYPER was adapted for preparing circulars, advertisements, and other material requiring various styles and sizes of types. When first put on the market in 1927, it was manufactured by Varityper, Inc., New York, N. Y., who were succeeded several years after by the Ralph C. Coxehead Corporation, New York, N. Y.

VELOGRAPH (German)

Cat. 44228, Neg. 421078.

Produced in 1886, the VELOGRAPH was the first Swiss writing machine, being the invention of Adolphe Prosper Eggis of Freibourg, and manufactured in Geneva, Switzerland. The types were cast along the circumference of a circular rubber plate which revolved to bring the desired type into printing position. Pressure on the type produced the printed impression. The machine had a revolving platen, which was moved forward when the type was depressed. It was similar to the SIMPLEX toy typewriter later sold in America.





VICTOR (a)

Cat. 41676, Neg. 415874.

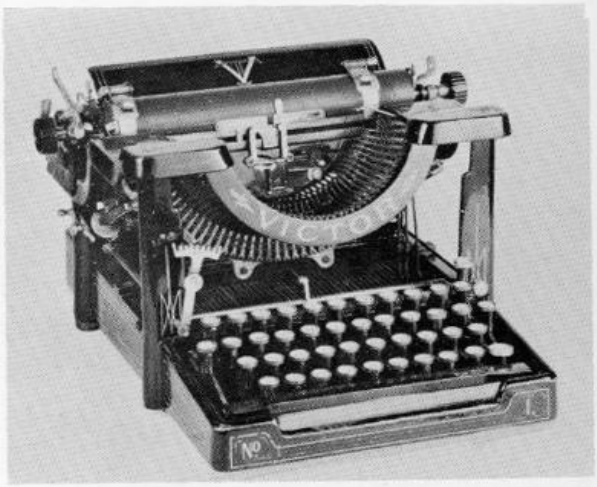
Invented in 1894 by F. D. Taylor and F. A. White of Hartford, Conn. Manufactured by Tilton Mfg. Co., Boston, Mass. This VICTOR was an indicator-type machine in which the type-wheel of rubber type-face was placed vertically. The lever which pressed the rubber type against the paper operated in the same manner as that of the AMERICAN. This machine had only a limited output.

VICTOR (b)

Cat. 47367, Neg. 423412.

Invented in 1908 by J. A. Hagerstrom, George W. Campbell, and William H. Hulse. The latter, of Montreal, Canada, is credited with inventing the broad-base, pivot-bearing type-bar, which was one of the many features of this machine. It is said that from August, 1907, to and including 1923, patents were issued every year for improvements on the VICTOR. First developed in Boston, Mass., then in the factory of the newly organized Victor Typewriter Co., of New York, N. Y., later the International Text Book Co., of Scranton, Pa., took over the enterprise. In 1917 the factory was moved to Scranton, the home of the International Correspondence Schools which were affiliated with the book company. The VICTOR met with only a fair degree of success in the United States.

Models No. 2 (Cat. 48597, Neg. 424429) and No. 3 (Cat. 41675, Neg. 415903) were produced in 1910 and 1912, respectively.



VICTOR No. 10½

Cat. 47368, Neg. 423417.

Produced in 1919 by the International Text Book Co., Scranton, Pa.

VICTOR PORTABLE

Cat. 41018, Neg. 415933.

Produced in 1927 by the Victor Adding Machine Corporation, Chicago, Ill. It had the standard four-bank, single-shift keyboard with front-stroke type-bar action. While it appears to have been wheel constructed and to possess the various advantages required of a modern machine, production ceased after a few years.

VISIGRAPH

Cat. 45014, Neg. 416142.

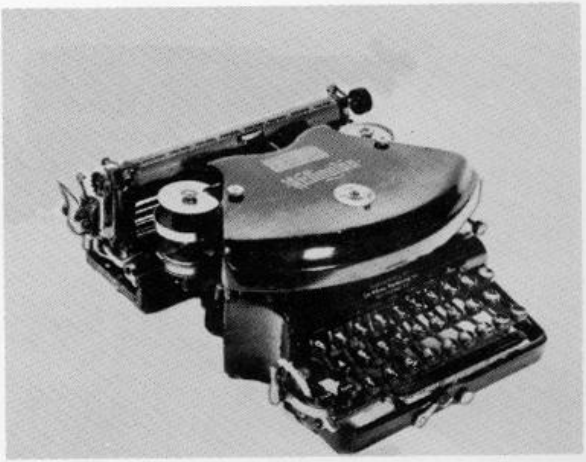
Invented in 1910 by Charles Spiro, who in the early days of the typewriter development had produced the COLUMBIA in 1884, and the BAR-LOCK in 1887.

This machine had a four-bank, front-stroke, standard keyboard, and was first manufactured by the Visigraph Typewriter Co., New York, N. Y. Later the C. Spiro Mfg. Co. of New York was formed, which took over production. In December, 1919, the business was sold to the Federal Typewriter Co., New York, N. Y., which changed the name of the machine to FEDERAL. Soon thereafter production ceased.

WELLINGTON

Cat. 41739, Neg. 415879.

Produced in 1896 in Plattsburgh, N. Y. It was known as the EMPIRE in Canada and Great Britain, and was also called BRITISH-EMPIRE in England. The inventor was Wellington Parker Kidder, who had also produced the FRANKLIN in 1891. The type action was of the forward-thrust variety also used in the FORD and the RAPID.



WILLIAMS

Cat. 41705, Neg. 415866.

This unusual machine was nicknamed the "Grasshopper," because of its peculiar type-bar action. The inventor, John Newton Williams, received his first patent in 1875. In 1888, he developed his machine in the factory of the Brady Mfg. Co., Brooklyn, N. Y., where the FITCH typewriter was being made. Production began in 1891. In 1892, the WILLIAMS was made in the factory of the Domestic Sewing Machine Co., which failed. In the same year, the Williams Typewriter Co., Derby, Conn., was organized. An active advertising campaign resulted in large sales. The two banks of the typebars lying flat on the top of the machine distinguished it from all others. Instead of a ribbon, the printing was done by means of two ink pads in which the type rested. Models No. 1, No. 2, and No. 3 had three rows of keys. In 1900, Model No. 4 with a four-bank keyboard appeared. Models No. 5 and No. 6 followed with few changes. In 1909, the company went into the hands of a receiver.

WILLIAMS No. 1-b

Cat. 46179, Neg. 421944.

Produced in 1892 by the Williams Typewriter Co., Derby, Conn. This machine had a curved keyboard.

Model No. 2 (Cat. 41020, Neg. 415988) was produced in 1895.

WILLIAMS No. 3, or WILLIAMS JUNIOR

Cat. 46181, Neg. 421945.

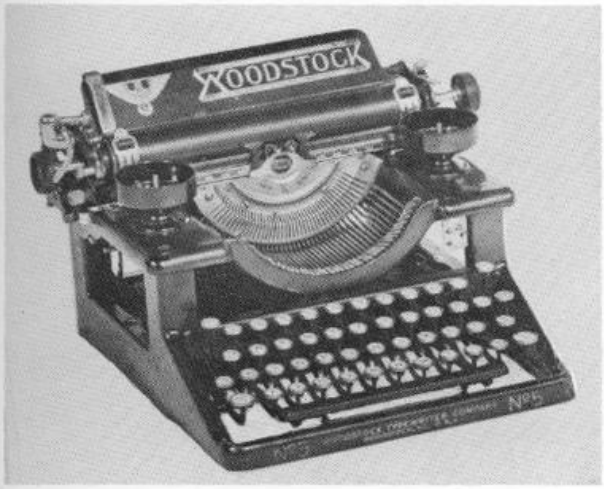
Produced in 1897 by the Williams Typewriter Co., Derby, Conn.

WILLIAMS No. 4

Cat. 41707, Neg. 415990.

Produced in 1900 by the Williams Typewriter Co., Derby, Conn.

Models No. 5 (Cat. 41021, Neg. 415991) and No. 6 (Cat. 40671, Neg. 415992) were produced in 1905 and 1906, respectively.



WOODSTOCK

Cat. 43080, Neg. 416139.

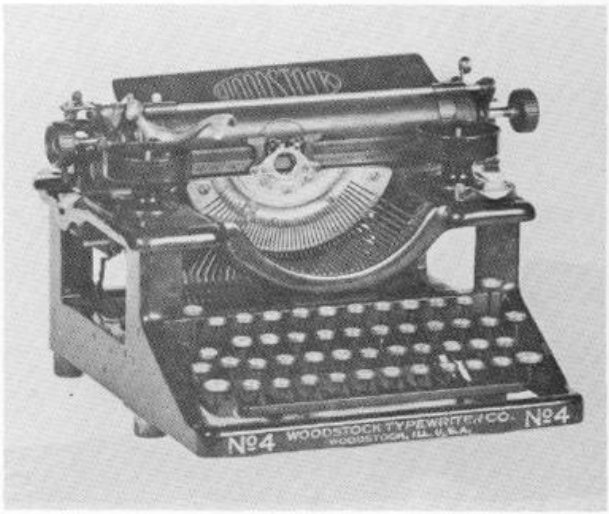
In 1914, the Woodstock Typewriter Co., of Woodstock, Ill., was organized to take over the assets of the Emerson Typewriter Co., which had previously produced the EMERSON. Entering a field already replete with practical-well-established typewriters, the WOODSTOCK again demonstrated that a meritorious article, properly presented, could achieve success. Built along modern lines and embodying the necessary mechanical features to meet the requirements of discriminating users, its success in both foreign and American markets was convincing evidence that the demands for a well-made machine had been met.

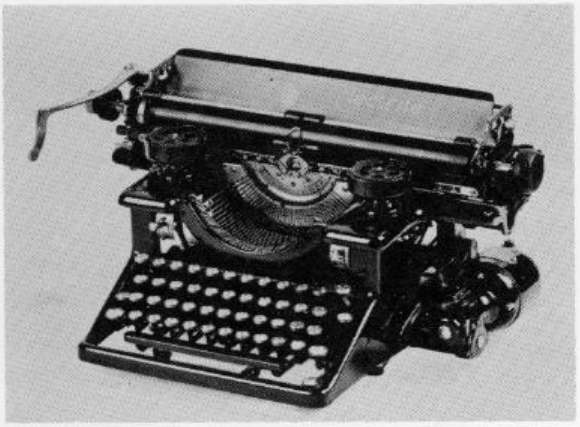
The Model 4 WOODSTOCK was put out under the name of ANNELL for a mail-order campaign by the specially organized Annell Typewriter Co., Chicago, which, however, did not prove a success. An especially successful advertising feature of the Woodstock Typewriter Co. had been the sending of "speed artists" to the various localities to demonstrate the rapid action of the mechanical parts of the machine.

WOODSTOCK No. 5

Cat. 43088, Neg. 416127.

Produced in 1922 by the Woodstock Typewriter Co., Woodstock, Ill.





WOODSTOCK ELECTRIC

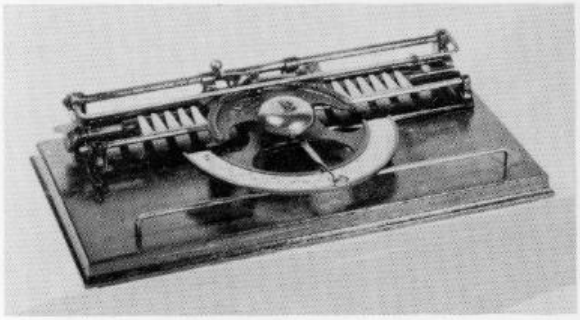
Cat. 42264, Neg. 416115.

Produced in 1925, this machine had a motor attachment, electrically controlled stroke, and electrically returned carriage. The machine was operable without the electric control. Manufactured by the Woodstock Typewriter Co., Woodstock, Ill.

WORLD No. 1

Cat. 41633, Neg. 415856.

Invented in 1886 by John Becker, Boston, Mass. Manufactured by the Pope Mfg. Co., and the Typewriter Improvement Co., Boston, Mass. This was an indicator type of machine using a rubber type-plate consisting of upper case type. Advertised as having a performance equal to that of the REMINGTON. The market was good over a period of ten years.



WORLD No. 2

Cat. 48319, Neg. 424152.

Produced in 1890 by the Pope Mfg. Co., Boston, Mass. This machine used upper and lower case type.

WRIGHT SPEEDWRITER

Cat. 47363, Neg. 423407.

This machine was found in the storeroom of the Salvation Army in San Francisco, California. It is unusual in that the frame of the machine is cast of aluminum, and it has a number of other unique features. No information has as yet been located identifying this machine, its creator, or the date of its production.

YETMAN TRANSMITTING TYPEWRITER

Cat. 43090, Neg. 415968.

Invented in 1903 by Charles E. Yetman, Washington, D. C. It combines a telegraphic transmission instrument with the typewriter so that messages could be received and transcribed on the same machine. Manufactured by Yetman Typewriter Co., New York, N. Y.

YOST

Cat. 41636, Neg. 415859.

Placed on the market in 1887 by its inventor, George Washington Yost, who had been identified with E. Remington & Sons and who, in cooperation with Frank X. Wagner, brought out the CALIGRAPH in 1880.

The YOST had entirely original type-bar action, the type falling back against an ink pad, permitting printing directly from the type without the use of a ribbon. By an ingenious motion of the type-bars, the types were directed through a central guide against the platen. This guide also controlled the alignment.

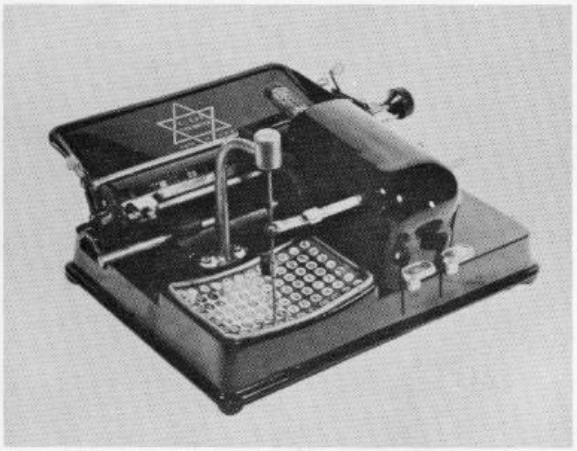
YOST-VISIBLE

Cat. 43089, Neg. 416129.

The demand for visible writing and the more rapid single keyboard caused the YOST to follow the modern trend, with the result that an entirely new machine, under this name, was presented to the public. It was invented in 1908 by Charles W. Walker, Bridgeport, Conn. The first machines were made in the factory of Merritt Brothers, Springfield, Mass., who had also produced the MERRITT in 1889. Later the machines were made by the Yost Typewriter Co., Bridgeport, Conn.

The new YOST-VISIBLE retained its original principle of inking by means of a felt pad instead of a ribbon, to secure which a very ingenious method of type-bar construction was devised by the inventor. Production in America ceased in 1924, but continued in England for the European and British Colonial trade.

Model No. 20 (Cat. 42052, Neg. 416084) was produced in 1912.



YU ESS

Cat. 41769, Neg. 415910.

Manufactured in 1918, this was a "sleeve-wheel" indicator type of machine in which the movement of a vertical indicator over the alphabet-plate raised or lowered the type-wheel to the point of alignment, and also revolved the type-wheel to bring the proper characters into writing position. Thereupon, depressing the contact lever brought the type-wheel sharply down on the platen to make the impression. Inking was by means of a ribbon. YU ESS is a contraction of "United States." The identical machine was produced in Germany in 1903, where it was known as the MIGNON.

CHRONOLOGICAL LIST OF TYPEWRITERS

1852 — Jones Mechanical Typographer.
1856 — Cooper.
1873 — Sholes & Glidden.
1876 — Arnold.
1877 — Sholes & Glidden.
1878 — Brady-Warner, Remington Nos. 1 & 2.
1879 — Crandall, Remington No. 3.
1880 — Caligraph, Hall, Hammond, Remington No. 4.
1881 — Bar-Lock.
1882 — Caligraph No. 2.
1883 — Caligraph No. 3, Columbia, Horton.
1884 — Hammonia.
1885 — Morris, Sun.
1886 — Velograph, World.
1887 — Yost, Brooks, Cash, Franklin.
1888 — Boston, Burns, Dictatype, Kosmopolit, Royal, Bar-Lock, Smith-Premier.
1889 — International, National, Odell, Stenograph.
1890 — Daugherty, International, Munson, Rapid, World No. 2.
1891 — American Visible, Densmore, Fitch, Hall Braille.
1892 — American-Standard, Dennis Duplex, Frister & Rossman, Jewet No. 1, Williams.
1893 — Blickensderfer, Blick Featherweight, Crandall No. 2, Hammond No. 2, International, Maskelyne, Peoples, Rem-Sho, American.
1894 — Crary, Crown, Edison-Mimeograph, Elliott-Fisher, Hartford, Remington No. 6, Victor.
1895 — Blickensderfer No. 5, Ford, Graphic, Jewet No. 2, Smith-Premier Nos. 2 & 3.
1896 — Smith-Premier No. 4, Williams No. 2, Blickensderfer No. 6, Elliott-Hatch, Granville Automatic, Lambert, Oliver, Remington No. 7, Wellington.
1897 — Blickensderfer No. 7, Densmore No. 2, Edelman, Munson No. 3, Oliver No. 2, Remington No. 8, Williams No. 3.
1898 — Adler, Champion, Chicago, Commercial Visible, Jackson, Manhattan, Pittsburg, Underwood.
1899 — American, Empire, Keystone, Meritt, Saturn.
1900 — Columbia-Bar-Lock, Conover, Draper, Ideal, New Century, Caligraph, Rem-Sho No. 6, Smith-Premier No. 5, Williams No. 4.
1901 — Sun.
1902 — Densmore No. 4, Fox (blind), Moya, Oliver No. 3, Pittsburg No. 10, Postal, Remington No. 10.
1903 — Chicago No. 3, Coffman, Kanzler, Stoewer Record, Yetman.
1904 — McCool, Mignon, Monarch, L. C. Smith & Bros.
1905 — Fay-Sholes, Hammond No. 12, Hartford No. 3, Remington-Sholes Visible, Secor, Sholes Visible, Stearns, Travis, Williams No. 5.
1906 — Crandall No. 3, Crandall No. 4, Eclipse, Fox Visible, Molle, Monarch No. 2, Monarch No. 3, Royal, Louis Sholes, Williams No. 6.
1907 — Armstrong, Blickensderfer No. 8, Densmore No. 5, Densmore No. 6, Emerson, Hanson, Imperial Visible, Junior, Oliver No. 5, Standard Folding, Torpedo.
1908 — Burnett, Defi, Imperial, Mercantile, Pittsburg No. 11, Smith-Premier Visible, Stearns No. 4, Victor, Yost-Visible, Pullman No. 8.
1909 — Corona, Empire No. 2, Japy, Mentor, Olivetti, Nickerson, Remington No. 9, Smith-Visible.
1910 — Bennet, Bijou, Columbia-Bar-Lock No. 14, Erika, Hammond Multiplex, Smith-Premier Linowriter, Picht, Sterling, Titania Triumph, Underwood Soundproof, Victor No. 2, Visagraph.
1911 — Crown Portable, Harris, Peerless, Pittsburg No. 12, Sholes, Stenotype, Royal No. 5.
1912 — Hooven Automatic, Imperial No. 1, Moon-Hopkins, Noiseless, Peirce Accounting, Underwood Standard Bookkeeping, Victor No. 3, Yost Visible No. 20.
1913 — Harry A. Smith.
1914 — Alexander, Annell, Century, Continental, Demountable, Halda, Harris Visible No. 4, Kappel, Oliver No. 7, Reporters Special. Rex Visible, Senta, Shortwriter, Royal No. 10.
1915 — Nippon, Reliance Visible, Woodstock.
1916 — Autocrat, Blick-Bar, Oliver No. 9.
1917 — Portex No. 5, Reliance Premier, Blickensderfer No. 9, Decker-Beachler.
1918 — Fox (Baby Portable), National Portable, New American, Oliver No. 11, Yu Ess.
1919 — Allen, Blick-Ninety, Garbell, Roberts Ninety, Victor No. 10½, Underwood Portable.
1920 — Gourland, Monarch Pioneer.
1921 — Bar-Lock, Fox Sterling, Hammond Folding, Map, Mercedes Electra, Noiseless Portable, Rofa, Shilling.
1922 — Woodstock No. 5.
1923 — Alexander, Diamond, Hammond Multiplex, Hermes, Liberty, Orga-Private, Smith-Premier No. 30.
1924 — Dayton, Frolio, Geniatus, Gundka, M-W, Remington Scout.
1925 — Bing, Eccles, Remington Electric, Remington Noiseless, Woodstock Electric, American Pocket Typewriter.
1926 — Barr, Merz, Underwood Fanfold, American Pocket.
1927 — Bing No. 2, Imperial, Varityper, Victor Portable.
1928 — Bijou, Oliver Portable, Rem-Blick.
1932 — Masspro, Remington Bantam, Royal.
1934 — Carissima.
1935 — Porto-Rite, Remington No. 11.
1938 — Remington Rem-ette.
1939 — Remington No. 17.