

THE MONOTYPE RECORDER

A JOURNAL FOR USERS AND POTENTIAL USERS OF
"MONOTYPE" MACHINES AND MATRICES

VOL. XXXIX

NO. I

AUTUMN 1949

CONTAINING AN ILLUSTRATED ACCOUNT OF
THE PIONEER DAYS
OF "MONOTYPE" COMPOSING MACHINES

LONDON

THE MONOTYPE CORPORATION LIMITED

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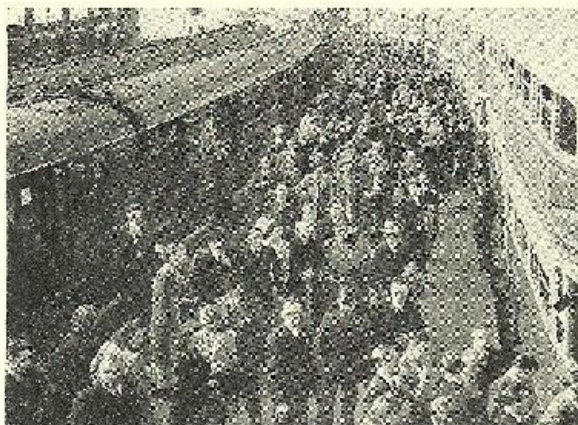
The MONOTYPE RECORDER is issued gratis to printing offices
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available to the public at 2s. 6d. each.

THE MONOTYPE RECORDER

FIFTIETH ANNIVERSARY NUMBER

AUTUMN 1949

THE FIFTIETH ANNIVERSARY CELEBRATION, MAY 13TH, 1949



LEFT:

Members of the Monotype Corporation arriving in Brighton by one of the specially chartered trains.



RIGHT:

Three of the Directors who, with the General Manager, greeted the 1,300 guests on the steps of the Aquarium:

The Rt. Hon. Harold Macmillan, M.P., Mr. E. Silcock, Sir R. Geoffrey Ellis, B.T., D.L. (Chairman) and Mr. J. Spencer Wills, M.INST.T.



Part of the company of members and pensioners of the Monotype Corporation, who were the guests of the Directors at a dinner-dance at the Brighton Aquarium on May 13. Report and further pictures on pp. 30-31, iii iv.

THE MONOTYPE RECORDER

A JOURNAL FOR USERS AND POTENTIAL USERS OF "MONOTYPE"
MACHINES AND MATRICES

VOL. XXXIX

NO. 1

AUTUMN 1949

FORTY-EIGHT years ago the first number of the MONOTYPE RECORDER was issued, to keep "users and potential users" informed of the progress of that new invention which meant so much to them. Throughout the pioneer years that followed, there was no doubt as to what the word "users" meant. It meant the owners of the machines, Master Printers risking their capital on a new invention; and it also meant foremen and overseers and compositors who had taken, or were taking, the tremendous adventure of throwing in their lot with the new keyboard.

Behind that sharply defined group loomed such of the great publishing houses as were not themselves printers, but did look upon a well-composed and well-printed page as part of their proud tradition. They marked the first instance of the "user-once-removed", a class which was destined to expand enormously as the advertising agencies and the more alert periodicals began to plan in terms of "Monotype" machine setting. In sporadic numbers from 1913 onwards, and steadily after Mr. Stanley Morison became Typographic Adviser to the Corporation in 1922, this journal (which has always changed its dress from number to number in order to present a working specimen of one or more type faces) attracted the interest of bibliographers on the one hand and designers on the other, while never losing its readership in the printing trade.

During the inter-war years, the MONOTYPE RECORDER acquired a remarkably wide reputation, first for its historical special numbers, and then for a series of articles dealing with such different typographic "Problems" as the catalogue, the Bible, the menu, the timetable, the book of verse, etc. By the late '30s the mailing list of the MONOTYPE RECORDER had been expanded, by personal requests, to include practically every name of distinction in printing, typography and publishing circles in the eastern hemisphere, as well as hundreds in America.

Since then, only two issues have appeared, each in that drastically reduced quantity which the times required. One of the numbers compressed into twelve pages of triple-column seven-point a scholarly, 20,000-word review of the social and other effects of the invention of movable type through the five hundred years that ended in 1940. The other chronicled the destruction of 43 Fetter Lane by enemy action, and the death in 1942 of the late W. I. Burch.

The MONOTYPE RECORDER would have been revived sooner had it not been for the need to replace vital stocks of instructional literature destroyed in the war, and to devote all remaining paper allowances to the provision of specimen sheets in the face of a post-war demand for "Monotype" matrices which far exceeded anything in the Corporation's experience. Even now,

the amount of paper available makes it unwise to put too liberal an interpretation on the phrase "users and potential users". But to the owners of the machines, the MONOTYPE RECORDER has always been one of those services for which the Corporation is well known. This present number, having to do with the Corporation's Fiftieth Anniversary and its early days, consists mainly of an illustrated article which was privately printed for presentation to each of the 1,300 members of the staff of the Monotype Corporation who gathered for the anniversary dinner at the Brighton Aquarium this Spring. There have been some emendations to the text in the light of a valuable contribution by Mr. Wilfred Bancroft of Philadelphia.

We are now planning a special Type Faces number, to be issued early in 1950, and it will be possible to put more copies on sale to non-users than is the case with the present number. This review of the pioneer

days of "Monotype" machines is not, we believe, of such general interest to the "user-once-removed" as to justify widespread distribution outside the trade. It is specially addressed to those members of the printing industry whose personal recollections cover the period under review, and it is offered to them with the earnest request for any supplementary reminiscences that they may be willing to set down on paper. What would scholars not give for a single sentence from some of the early 16th century printers that would throw an informal sidelight on the days when the printing press was a novelty! Our article is written in informal style, the better to invoke the mood of personal recollection amongst readers. Letters from pioneer users and operators will be received with the keenest interest and preserved in the archives from which the history of the Corporation will be documented, in time for its next major anniversary.

MR. FRANK COLEBROOK

WHO WROTE ONE OF THE FIRST ACCOUNTS OF "MONOTYPE" MACHINES IN ENGLAND (SEE P. 13)
HAS SENT US THE FOLLOWING MESSAGE OF CONGRATULATION:

I pinched myself to make sure I wasn't dreaming at that moment of marvelling, over fifty years ago, when I closely inspected the first "Monotype" machine set up in London. The Lanston Monotype we called it. For pretty well an hour I peered and poked and nuzzled and puzzled, feeling a new thrill in that I was joining in a welcome to that wonder. Naturally thought turned backward to the Paige machine adventure. Paige had set out to cast single letters and to compose them, and all in one and the same machine. Though Paige's financial backers included the great humourist, Mark Twain, the Paige was no joke. That courageous complexity never functioned. It was too clever by half. Lanston's invention was not too clever by half. It was just clever enough—by doubling. It made two bites at its cherry, a keyboard bite and a caster bite. Well, there it was, fifty years ago, with mechanical and commercial

success written all over it, for eyes of prescient printers.

But even prescient printers could hardly foresee what a veritable academy of art, of design, what a school of culture in relation to typography the Monotype Corporation would also become. How many fine types—and fine typographers—it would create. It came too at about the right moment. Printers were feeling after better things. The craft had never been without some voice crying in the wilderness. It had had its Baskerville, its Whittinghams, its Pickering, its Bellows, its Hailing, its George Jones, its Morris and others like minded. Many were ready to follow in their train. Well, the Monotype Corporation would train them.

My salutation and Godspeed to the MONOTYPE CORPORATION, its artists, its designers, its engineers—pillars and ornaments as they are of the noble craft of printing.

THE PIONEER DAYS OF
"MONOTYPE"
COMPOSING MACHINES

"WITH the Unitype, Dow, Empire, Macmillan, Johnson, Lanston, Goodson, and a few other typesetting machines which are now on the eve of being placed on the market, there promises to be a merry time in this new industry. Competition being the life of business, the Mergenthaler Company may experience an unusual state of affairs before many months elapse." So spoke the *Inland Printer* of Chicago in its newly-established department of notes and queries on Mechanical Composition, in January of what was to be one of the decisive years in the history of type composing machines, the year 1899.

To the printers who followed that column, the names it singled out for mention had the cryptic excitement of a list of the likeliest outsiders entered for the Derby. The stakes, however, were higher than any ever wagered in the field of sport; and the seven runners mentioned above did not by any means constitute the whole field. The *Inland Printer* had earlier remarked that "no less than 32 [composing machines] have come prominently before the public, including the 'has-been's', the 'is's', and the 'would-be's' ". Thirteen or fourteen machines had become things of the past, seven or eight were to be reckoned with in the present, and another fourteen or fifteen were already looming up in the foreseeable future—quite apart from some 200 sets of patents for typesetting machines which would never exist except on paper. The average cost of marketing such a machine, said the editor, "is probably to be counted in the hundreds of thousands of dollars, and the one that has found the largest sale is credited with spending

over a million in establishing itself". The article mentions the seven main categories into which all the machines could be grouped, and concludes: "the printing fraternity is vitally interested in the determination of which of them will stand the test of time...."

In a later issue, the same paper remarked: "When it is understood that the Bible is produced in no less than 164 languages, the average man can see why the typesetting machine inventors are so sanguine and have so much encouragement." True, some printers were picking their way cautiously: the representative of a typesetting machine had reported that an order "was immediately cancelled upon the printer's ascertaining that the machine was not run by treadle power, the printer declaring he would not place himself at the mercy of any steam or electric power company". This same representative had complained "that this department of the *Inland Printer*, by keeping the trade informed of all the various types of machine which exist purely upon paper, causes the would-be purchaser of his machine to delay placing his order, fearing some of these new devices would make his machine worthless before he could realize any benefit from it". But the *Inland Printer* only told this malcontent that "his particular machine must keep up to the procession of the age or get lost in the shuffle".

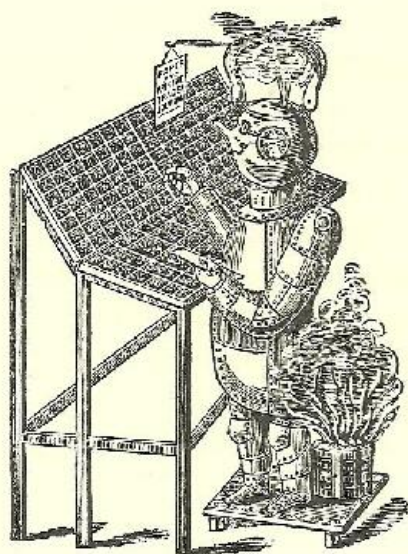
Read at a distance of 50 years, these ephemeral paragraphs provide something which the sober historian too often fails to convey to the ordinary reader. For the historian must concentrate on showing what actually happened; he has little time to recreate for us the mood of tension and expectancy in which not one future but a dozen wildly different futures lay just over the mental horizon. The Fiftieth Anniversary of any important invention is an occasion, not so much for the writing of formal history as for the recording of personal reminiscences while they still lie within living memory, and the bringing back to light of such informal and characteristic comments of the early days as help to recreate the atmosphere of adventure in which the invention came into being. In this year 1949, in every centre in the world where printing is practised on any scale, there are young people entering the trade to whom the existence of "Monotype" machines is a matter to be taken as serenely for granted as any other phenomenon that has been going on (for all they know) since the beginning of Time. Theoretically, of course, the young people know that mechanical composition arrived within their grandfathers' living memory; but if they think of the matter at all, they probably think of the composing machines as having rolled smoothly and

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punctually into history, like so many suburban trains lumbering into a terminus. It would be rash to say that this attitude of calm acceptance makes the apprentice any less quick to learn, or any less eager for scientific instruction; all that can be said with certainty is that the pioneer generation of operators and owners, who had an infinitely harder time in getting the hang of their machines, found in that struggle a degree of excitement, a tingle of sporting interest, even a sense of genuine danger (lest the whole invention be tossed back on the tall pile of "has-beens"), which are all highly appetizing to young minds. Personal recollections of the early days of struggle have, therefore, a real contribution to make to technical education, since they can do something to rub off that tarnish of the commonplace which always gathers on any proved and accepted idea, and can restore to it that glint of the marvellous which is still visible enough to the layman. If the following notes and quotations succeed in evoking from our readers their own first-hand recollections of early encounters with "Monotype" machines, this article will have served its primary purpose; and the documents and side-lights thus gathered will be of no little value to the typographic historian in decades to come.

The seven systems of composition to which the *Inland Printer* had referred were roughly divided into the two classes "hot" and "cold" according to whether they dealt with ready-made type (setting it, or justifying it, or distributing it), or used molten metal to cast a new printing surface. The first experimental typesetting machine was that of William Church (1822). The Young-Delcambre machine, with its piano-like keyboard, was patented in 1840 and was used in 1842 to set the *Family Herald*. Dr Alexander Mackie of Warrington, whose first typesetting machine was patented in 1866-7, produced one in 1869 which used a strip of paper. Perforations in the paper allowed corresponding levers to drop and release type down a channel into a composing-stick, where it was justified by hand. With the Hattersley (*post* 1857) and the Kastenbein, one comes to names that are not yet outside the living memory of the Trade. The battery of Kastenbeins which was replaced by "Monotype" machines at Printing House Square in 1908 had been installed in 1872, and since 1886 had been supplied with new type each day. The used type was not distributed but was returned to the typefounders to be recast. But the contemporaries of *The Times* in the 'eighties were slow to see the point of non-distribution—until it was presented to them as an essential feature of the first successful "hot" machine:

Ottmar Mergenthaler's epoch-making Linotype. Though the first patents for that machine were taken out in 1874, it was during the decade 1881-91 that it emerged as a practical and revolutionary invention.



THE NEW STEAM COMPOSITOR

IT was then that the hand compositors stopped laughing at the notion of expecting a mindless machine to set type from a manuscript. What stopped the laughter was not the fear that any such nightmare could ever conceivably come true. It was the fact that a new and far from comical image was being substituted. In place of the mindless goblin they now saw a matrix-composing and line-casting machine being "minded"—humanly directed and kept in order—by a mechanical engineer or "machinist" imported into the trade: a specialist with a spanner who had never held a stick in his hand: a tinkerer and tapper of keys, to whom the setting of over 1000 ens in

an hour's time was not what it seemed to the hand craftsman—an honourable feat achieved after long and arduous training and concentration. The history of "Monotype" composing machines cannot be understood without a realization that the full weight of trade opposition as such had gathered, fallen and broken on the Linotype almost a decade before any other make of composing machine had gone into factory production. When Mergenthaler died of consumption in 1899, at the age of 45, over 6000 of his machines were in use, mainly in large newspaper offices. The Press paid its tribute to the inventor to whom it owed so much, and referred to the results of the invention in terms which were not always flattering to the case hands. The American trade union organ, the *Typographical Journal*, was stung to the comment that "These effusions generally contained something about the operator who receives more wages and drinks less liquor. . . but we have not noticed one word about the army of compositors—generally old men too—who eat considerably less than they did under the old regime. The ignoring of this factor makes it easy to write optimistically of the effect of inventions." That was a very muffled echo of the tumult of the

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decade before, and statistics were making it clear enough that whatever loss of employment had come to the older line hands who could not adapt themselves to the new era, it was more than counterbalanced by the very great increase in the actual volume of printed matter. In that same month Charles Connor of the American Type Founders Company was reporting that what that company had lost in the way of body-type sales had been made up by the increase in the sale of display type and supplies: "Magazines and newspapers have been increased in size, and new plants have sprung up all over the country. Weeklies have become dailies, etc."

Mechanical composition, therefore, was an accepted fact 50 years ago. What it is difficult to realize to-day is the extent to which the notion of the mechanical typesetter as such—and as distinct from the casting-and-composing machine—continued to appeal to the minds of inventors and prospective purchasers alike. The principle involved was easy to grasp, namely, that if types were cast with a special combination of nicks for each different character, they could then be mechanically selected or distributed. But when the possibilities of that idea were fully and finally worked out by J. W. Paige in 1895 the result was a composing-justifying-distributing machine which made something of the same impression on engineers of the day that the so-called "electronic brain" calculator mechanism has made upon present-day scientists. Legros and Grant* call the Paige machine "the foremost example of cam mechanism ever produced in the United States, if not in the whole world", and one of the patent attorneys who worked upon it called it "an intellectual miracle". In 1898 Philip T. Dodge, President of the Mergenthaler Linotype Company, presented the original Paige type-setting machine to the Science Museum of Cornell University as "the costliest piece of mechanism ever constructed"—one which had absorbed nearly two million dollars of capital in the manufacture of its 19,000 parts. Part of that capital had been provided by Samuel Clemens (Mark Twain).

Meanwhile, Tolbert Lanston's invention of a machine for setting justified lines of single type had been (in the eyes of the trade) making a series of tantalizing false starts. As early as January, 1892, the *British & Colonial Printer* of London devoted a front page to the possibilities of Lanston's machine, and the model that was pictured there (*see overleaf*) was exhibited casting types in the Columbian World's Fair of 1893—along with another that used four die cases

* *Typographical Printing Surfaces*, 1916.

THE PIONEER DAYS OF "MONOTYPE" MACHINES

and moulds, and four strips of perforated paper. Lanston's earliest models, for which patents were granted in 1887, consisted of a keyboard for perforating the paper ribbon and a machine corresponding to the modern caster in that it made types and spaces and composed them in justified lines, according to the perforations in the ribbon. The types were made by cutting lengths, narrow or wide according to the character, off an endless strip of cold type metal, forming the character by compression and trimming. In justifying, not simply the word-spaces but every character in the line received an increment of width according to the predetermined action of the justification mechanism. Thus, each line was perfectly justified when the final character took its place in the line. As Henry Lewis Bullen pointed out,* "Many otherwise expert inventors have since attempted to effect exact justification of single type but invariably without success. Lanston, in 1887, solved this problem, the stumbling block in the path of all other type-setting machines, in the only way, it would seem, in which it can be done....The commercial machine [of 1887] was a failure, but there never was a more brilliant or more hopeful failure."

TOLBERT LANSTON was born in Troy, Ohio, on February 3rd, 1844. At the end of the American Civil War, in which he served as a volunteer, he went to Washington, D.C., at the age of 21, and became a clerk in the Pensions Bureau. He rose to some eminence in the Bureau, and meanwhile studied law and was admitted to the Bar. His was that rare type of mind which, without any training in the mysteries of mechanical engineering, can devise original inventions. Such men often find it hard to induce engineers to take them seriously; but Lanston, before he became interested in type composition, had gained some reputation as the inventor of a mail-bag lock, a hydraulic dumb waiter, and an adding machine. In Washington he became a friend of Colonel Scaton, son of a newspaper proprietor who had been a contractor for Government printing. Colonel Scaton



TOLBERT LANSTON

* *Inland Printer*, June, 1924.

became Director of the Census and Lanston, visiting his friend's office, had a chance to inspect the machine invented by Herman Hollerith which classified and tabulated statistics by the use of perforated cards.

In 1891 the first formal announcement and description of a "Monotype" machine appeared in the *Philadelphia Paper and Press*. It was written by Harold Malcolm Duncan, a technical journalist, editor and publisher, who had become Lanston's friend and technical adviser. During a visit to Lanston in Washington, Duncan made the acquaintance of J. Maury Dove, a wholesale coal merchant and hotel owner, a well-known benefactor of Catholic charities, and a good representative of the adventurous capitalist and idea-promoter of the epoch. Dove did for Lanston's machine "what the indefatigable Clephane did for the Linotype—nursed it from impracticability to success" (H. L. Bullen). Having taken on the presidency of the newly-formed company for 6 months, until some better man could be found, Dove died in that office at the age of 69, in 1924; he had never allowed himself a holiday in the 35-year interval. Only a strong will could have survived the long and repeated postponements and mechanical second-thoughts which delayed the marketing of "Monotype" machines, even up to the year 1901. It was Dove who laid down the basic policy which has been maintained by all who have since had a hand in the development of "Monotype" machines—the policy of making every successive improvement adaptable to all existing machines, in order to protect the user from loss on obsolete equipment.

By 1894 it had become evident that at least one method of machine composition, that of line-casting, had "arrived". Any rival, supplementary or complementary method would have to fight for its place in the sun, and every year—indeed every month—in which Mergenthaler's invention could have the field to itself would add that much to the handicaps of the newcomers.

Dove therefore decided in 1894 that the time had come to put Lanston's invention into production and on the market. A contract was made with the engineering firm of Sellers & Co., of Philadelphia, to build fifty casting machines from Lanston's drawings. The sixth successive model appeared in 1897. The number of characters in the matrix-case had been reduced from 225 to 132, on the theory that machine setting was primarily a device for newspapers, for which market the "limited font" would suffice. In the firm of Sellers & Co. was one of the foremost mechanical engineers of that golden age of mechanical ingenuity,

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John Sellers Bancroft. But Bancroft, it would seem, had nothing to do with the design of the limited fount caster.*

In this 1897 machine "the die-case mechanism was an entirely new feature. Dimensioning devices for determining the extent of the movement of the blade were adopted, a wedge being employed for this purpose. Justifying increments were added to the spaces only [instead of to the bodies of the letters themselves]. . . A line of inaccurate length caused a stoppage of the entire machine."†

When the first contract was completed, Sellers & Co. were given a further contract to re-design the casting machine completely and to build fifty machines of the improved design.

John Sellers Bancroft had complete charge of this work and his 1899 machine not only restored the matrix-case to its 225-matrix capacity but also introduced basic improvements. We are indebted to his son, Mr. Wilfred Bancroft, for the following interesting notes and comment: "To minimize the movement of this much heavier matrix-case he created the first selective mechanism in which the part, the matrix-case, capable of moving to different positions, did not return to a base before moving to its next position. Thus, the matrix-case seems to have



JOHN SELLERS BANCROFT

second sight for after an 'l,' for example, is cast, if the next letter to be cast is another 'l,' the case remains 'as is' and does not move at all. In the history of invention there are many instances of inventions being applied to a use of which the inventor never dreamed. . . Bancroft's U.S. Patent No. 617,551, issued January 10, 1899, for a spacing table 'particularly well adapted to punching metal plates, etc.,' covered the tongs mechanism that freed the matrix-case from needless motion. It is a far cry from a machine for punching holes in boiler plate to a machine controlled by holes in a paper ribbon."‡

* This information, recently received from Mr. Wilfred Bancroft, an officer of the Lanston Monotype Machine Company, Philadelphia, and son of John Sellers Bancroft, contradicts H. L. Bullen's statement (*Inland Printer*, May 1924) that Bancroft was responsible for the design of the limited fount machine.

† H. L. Bullen, *op. cit.*, quoting a communication from H. M. Duncan.

‡ From a recent note by Mr. Wilfred Bancroft.

At that same time, Bancroft turned his attention to the keyboard. The first keyboards used commercially had been built from Lanston's design by the Incandescent Arc Light Company of Brooklyn, New York. In this early model the operator reversed the line indicator by pulling a lever after finishing each line. This action raised weights which acted as motive power for advancing the ribbon spool, em scale pointer, and justifying scale pointer. Bancroft's mechanical keyboard was built by Sellers & Co. The keys, through keybars, operated rockshafts that moved the bars that carried the punches for perforating the paper ribbon. Thus, in some ways, this board anticipated the "D" keyboard of 1907 with which Bancroft provided a triumphant and still valid solution of the problem. But his early mechanical board was superseded by Lanston's "C" keyboard patented in 1900 and built under his supervision by the Taft-Peirce Company of Woonsocket, Rhode Island. This "C" keyboard was the first to be operated by compressed air. The key buttons were directly attached to the air valves of the keyboard; thus there were 225 air valves instead of the 33 of the "D" keyboard.

But in 1897, the road to these improved models seemed blocked for lack of capital. The successive experimental models had exhausted the Lanston Monotype Company's resources, and a very large sum would be required to embody Bancroft's improvements and to devise the plant and build the factory for large-scale production. London was, at that time, the international fountain of capital for new enterprises and inventions; accordingly, in May, 1897, J. Maury Dove and H. M. Duncan took four of their limited fount "Monotype" machines to England. During the Atlantic crossing the travellers had the good fortune to meet the Earl of Dunraven, whose name was familiar to all Americans as that of a competitor for the international yachting trophy. The shipboard conversations led to swift action. Soon after the machine had been erected and shown for the first time in England, a syndicate, headed by Lord Dunraven, was formed to purchase the British rights in the invention for £220,000—the sterling equivalent of that one million American dollars which Dove, and Bancroft of the Sellers Company, saw as the probable minimum amount they would need to put their machine into commercial production.

LONDON, in 1897, was preparing to celebrate the Queen's Diamond Jubilee. The printing trade could look back across the 60 years of her reign to a time when the printing machine was scarcely beginning to supplant the hand press

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outside the newspaper offices; when photography was still unknown, and photo-mechanical illustration undreamed-of; when English typesetters were setting the world styles in boldly ingenious jobbing faces, whilst in the book houses, no one had yet dreamed of pampering the publishers by offering them a choice of type in two different periods of taste (modern and "old"). The sense of the past, or at least the sense of the immensity of the technical changes that had occurred within a lifetime, sharpened the general interest in the future. The twentieth century loomed near ahead. Technical education had been making rapid strides. The St Bride Institute printing classes had been active since 1891; a little later the Borough Polytechnic had evolved what were in effect classes in layout; now the Central School of Arts and Crafts was offering eminent instruction in lettering and bookbinding, at its original home in Regent Street. A newly published trade handbook of display composition, following the watertight methods of thinking about "art" that characterized those days, divided all such display into the three distinct categories, "Commercial", "Artistic" (i.e. ornamental) and "Modernized Old Style" (i.e. pseudo-Kelmscott).

Young Mr Frank Colebrook, already known as a felicitous lecturer and writer, had taken on the editorship of an elderly little monthly, the *Printing Times and Lithographer*. Its 1897 volume makes fascinating reading to-day. The January number carried a warning and rebuke to British typesetters. Their specimen books were "impressive enough on the outside", but inside, "chaos reigned supreme". Pages of stock stereotypes of cattle, etc., mingled anyhow with book and newspaper types. The copy seemed to be chosen to be as dull as possible. And why did none of the Big Five type foundries, now that their ring was broken, have the courage to advertise? These were very pertinent questions in view of what was going on in America. There, in 1892, 19 leading type foundries had consolidated with a capital of nine million dollars at the moment when they were losing three-quarters of their sales of body type. In the following year the American Type Founders Company (A.T.F.) took over its biggest single customer, the Thorne Typesetting Machine Company, which was merged with the Cox Typesetting Machine (controlled by the Barnhart Bros. & Spindler type foundry) to form the Uniscript Company. After the change the Thorne machine was altered and restyled the Simplex. Meanwhile the head of the Thorne Company, R. W. Nelson, became the guiding power of the A.T.F. and steered it away from near-bankruptcy in 1894. That was the beginning of a period of

roughly 30 years in which the leadership in type design remained in American hands despite some fairly spirited creative efforts in France and later in Germany. It was the A.T.F. which first created a special type designing department, and first put the problems of type design on something like a scientific footing, by exploiting the possibilities of L. B. Benton's pantographic punch-cutting and matrix-engraving machine (1885-6). If the English typefounders had, at any time during that 30 years, shown anything like the same spirit of initiative and adventure which characterized the A.T.F., they might have postponed for years the moment when the aesthetic opportunity passed from their hands into those of the Monotype Corporation.

In one of the lawsuits of the early months of 1897, the Wicks Typecasting Machine Co. lost a libel action against the *Financial News* for a waspish comment on the Wicks stock issue. The Judge rejected the horrid suggestion that the article had been inspired by a certain composing-machine company; but whoever was its author, he evidently meant to block any move towards "non-dis" that the newspapers might be tempted to make by way of the new Rotary Type-caster, which for some years was to advertise bourgeois at 9d. a pound, "turned out by the Rotary Machine at the extraordinary speed of upwards of 75,000 an hour". The *Inland* mused on the 400 per cent. profit the Wicks shareholders would reap by the time it had re-sold all that once-used newspaper type to "the colonies and provinces", but the anonymous critic scoffed: daily papers, he said, "know that new cast type... is an unmitigated curse; not only does it dazzle, but its smell is troublesome, and it cuts the fingers and brings on blood poisoning".

In 1897 John Southwood was preparing his book, "The Progress of Printing in the Victorian Era", a copy of which was sent to Mr Gladstone with the explanation that "the typographical part was done without type (except a few ornamental headlines), and the engravings without the use of a graver"—i.e., by slugs and half-tones. *Penrose's Process Year Book*, price 2s. 6d., was even then reflecting credit on its producers, Messrs Percy Lund, Humphries. Mechanization was even creeping over forbidden ground. Mr Val Prinsep, R.A., was complaining that amongst the miniatures submitted for exhibition at the Royal Academy, hundreds had to be thrown out because they were painted over photographs. In Edinburgh, the Master Printers decided that to yield to the machine minders' demand for a 50-hour week (instead of 52½ at the minimum wage of 32s.) would be disastrous to that city's interests as a book centre.

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*From a half-tone in Black and White
magazine of October 30th, 1897*

ON June 12th, 1897, at an office in Leadenhall Street, a technical committee of three met to test the new "Monotype" machine that had come over from America. They were Alfred F. Blades, Cameron Swan, and H. M. Duncan. The machine produced over 24,000 ems of solid minion at an average of nearly 10,000 ems an hour, and type taken from the caster and printed without make-ready, on a platen and on a cylinder press, gave the impression of new foundry type. On June 24th Lord Dunraven presided at a statutory meeting of the Monotype Machine (British Patents) Syndicate, Ltd., at which Mr G. R. (later Lord) Askwith announced that the Syndicate had been formed with a capital of £30,000, much of which had been paid on account to the vendors of the rights. The invention, he said, would cause a revolution in the printing trade; what was

involved was not only a great saving of labour with greater speed, but "a quality of type equal to that which was now set up by the hand labour process". The new machine differed from the earlier models by its "extreme simplicity": its manufactured parts were small in number compared to those of other machines, and it was consequently less liable for repairs, wear and tear, and machinists' attendance. The only disadvantage which the Syndicate faced was the shortness of the time for completing the purchase. The public were invited to share in the venture.

Shortly after this an anonymous article appeared in a provincial printing trade paper and was widely circulated in pamphlet form as "An Enquiry into the Claims of the Lanston Monotype Machine". In the light of subsequent events this hard-hitting attack unconsciously provides more valuable testimony than any mere puff could have given, to the nature and extent of the triumph that lay ahead for "Monotype" machines. The writer argued that the whole future of mechanical composition lay with the Linotype, and that any field outside that machine's reach would consist only of "certain special houses and the higher

class of book printers. These latter are the most difficult section of the trade to cater for. They are the most wedded to old systems and *will absolutely touch no machine whatever until they are perfectly satisfied that its output is equal in quality to, and indistinguishable from, the best typefounders' productions, and also that the saving of cost is unquestionably considerable.*" (The italics are ours.) The writer thought that there was "very little hope" that such a stronghold could ever be conquered!

At the London Printing Exhibition of 1897, "Monotype" machines were not shown—though two of them had been at work and on view for some months in the office of Wyman & Sons, Fetter Lane. Even the Empire machine, which had booked space, was unable to appear. Once more, and for the last time, the Linotype had the field to itself—rather to the disappointment of the trade press and the printers, who had been hoping for something lively in the way of competition. Mr Colebrook's paper pointed out that "the Lino" could not rest on its laurels. True, the Company was keeping the Patent Office busy. "But all the while the enemy is on the alert. Now it is the Empire; now it is the Fraser . . . now it is the Lanston Monotype in America; now it is Lord Dunraven's Syndicate working that machine in England, and anon it is the Monoline recently shown at the Brussels International Exhibition. . . ." W. S. Scudder's Monoline and J. R. Rogers' Typograph were two machines that had to be developed on the Continent since they were blocked in America by Mergenthaler patents. The Typograph, in Germany, had at this time the advantage of the services of a young and brilliant American engineer, Frank Hinman Pierpont.

The Syndicate brought out a descriptive pamphlet, "The Lanston Monotype Machine for casting and setting Single Type in perfectly spaced Lines", composed on the machine that was being demonstrated daily at Leadenhall Street. It opened with the basic assumption on which the whole future of the Corporation was to be built:

"However ingenious a machine may be, whatever the speed it may attain in composition, quality in printing surface and facility of correction are essential features of its practical utility. No machine that is devised to do what previously was done by hand can be looked upon as correct in principle or perfect in adaptation, unless it maintains equal quality and greatly increased quantity of production. In such degree as the machine lowers the standards created by the slow evolution of manual methods, it must be pronounced a failure."

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It announced that the machine was being built in "two forms" for the American trade: one the "limited fount" machine that was being shown in London, "for newspaper work and straight matter where italics and small caps are not used", and the other with the full range of 225 characters. It will startle many modern readers to learn that both machines were to be equipped with "such logotypes as occur with greatest frequency in composition, such as 'th', 'to', 'of', 'at', etc., giving an increase of speed of more than 8 per cent." For more than a century it had been as easy to prove (on paper) that logotypes would save time, as it is now easy to prove that Fonetik Speling will save thousands of man-hours.*



THE EARL OF DUNRAVEN

IN December, 1897, the Lanston Monotype Corporation† was founded with a capital of £550,000, under the Chairmanship of Lord Dunraven. Early in the following month the *Printers Register* raised its editorial eyebrows at a letter that had been published in a financial newspaper: a letter "in which", said the *P. R.*, "a solicitude for the pocket of the prospective investor in the Corporation was shown, which would have been really pathetic had it come from persons who had no financial interest at stake". But the Linotype Company was making no hollow pretence of disinterestedness. Their Secretary let it be known that his firm had purchased the patents of the single-type casting Tachytype machine for £25,000 and was going to build such machines, just in order to find out "whether genuine orders can be obtained for a machine built on the principle

of the Lanston Monotype; and if there is any part of the printing field unoccupied, the directors intend to occupy it". In due course the Tachytype machine was adjudged an infringement of the patents which the Syndicate had purchased. But the rumble of litigation had induced a mood of caution.

* Several of the "cold" typesetting machines had been designed to make it easy to strike chords of letters, so that one movement of the hand would release a group of types, or a logotype, into the channel.

† The name was changed to The Monotype Corporation Limited in 1931.

"The public must remember", said the *Printing Times*, "that they are dealing with a patent, and also with a machine, that, perfect as it seems, may yet be superseded, and that is not at present a proved commercial success."

Unfortunately for the English Corporation, the machine of 1897 did not seem anywhere near perfect to J. S. Bancroft in Philadelphia, who had no intention of letting that million dollars be wasted by precipitancy. The "limited fount" idea was abandoned, the pneumatic keyboard reinstated, and the work began of finding the highly skilled toolmakers and creating the machine-tools and plant for the regular production of the machine of 1899—the first that can be thought of as the older brother, rather than merely the ancestor, of the "Monotype" machines that are in use to-day. For the seventh time in twelve years the Lanston machine had given the printing trade a tantalizing glimpse of something radically new and highly significant in the way of mechanical composition. Now once more it retired into the wings, and the trade press had nothing to report of it for 18 months.

Meanwhile the machine age marched on. The *Inland Printer* heard that an Automatic Photo-Printing Syndicate had been formed in London with "an invention designed to do the work of a compositor" by a keyboard that would photograph characters on to a negative strip of film "much like a kinetograph", but this early photo-composer had no such fabulous future as awaited the "kinetograph". In the *Typographical Journal*, Henry W. Cherouny pleaded for the 9-hour day in an article which, incidentally, shows how the American language has changed in 50 years:

Nothing in the world is more adapted to foster the family life of working men than the granting of the nine-hour day. Including the time of travel to and from business, there are daily 12 or 13 hours of exertion to benumb their hearts against the cheers of the home... The shortening of the work-day has become a passion with the rank and file of industry; by this device all trades hope to improve their moral and intellectual standards. England has had to give way... Impoverished Germany has the nine-hour day, and we citizens of the land of milk and honey... are in this respect behind the monarchies of old Europe...

Yet even then, before the 9½-hour day became law in America, many large offices had been working the shorter hours by voluntary mutual arrangement, thanks to the coming of mechanical composition.

While Sellers & Co. struggled with the new model, the attitude of the Trade was fairly reflected in a long article, which appeared first in the *Inland* and then in the *British & Colonial Printer*, on the relative merits of the different methods

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of machine composition. In this the slug machine on the one hand, and the cold typesetter on the other, were seen as permanencies whereas "the type caster, or machine that casts its type as it is set", while admittedly a marvellous production, was "as yet largely experimental". There follows a sentence of great significance. "Until some concern spends a fortune in cutting and perfecting faces and sizes of type for the use of type-casting machines, the system is minus its greatest advantage." It was "while waiting for such faces" that Lanston's machine, in the writer's opinion, had to be regarded as an experiment.

By casual references one is reminded of some of the disadvantages of the old system. Sir Henry Burdett, speaking to the Association of the Correctors of the Press in 1898, ruefully admitted that the reference book which he edited "eats up in one edition something like eighteen tons of type, and . . . contains so many figures that I would not be able to get any printer in the trade—except the printer who has now got it and has gradually built up his fount of type—who would undertake to produce it".

The "machinist" was beginning to be digested into the trade. An article which appeared first in the *Typographical Journal* (1898) and then in England, pleads with those who are now "mere line assemblers" to become "thorough machine operators". Would not the pressman "deem it a reflection upon his competence" if an outside expert were brought in to make the daily mechanical adjustments to the press? Operators should take a similar attitude, etc.

The year 1899 opened on that note of expectation which sounded in our opening quotation, and in each successive month news of one or another of the just-round-the-corner machines enlivens the *Inland Printer's* column:

The Unitype Company is well pleased with the number of orders which are being placed for its Simplex machine, but the Company's extreme conservatism prevents any demonstration beyond a gratified smile.

The Dow Typesetting Machine Company is now actively engaged in the construction of a number of its highly meritorious machines, and a host of printers are anxiously awaiting news of their action. . . .

The Johnson Typesetter Company, capital \$3,000,000, offers for sale 3000 shares of stock. . . . The Johnson can be manufactured and sold at a large profit at two-thirds the price of a Mergenthaler.

The Goodson Typesetting Machine Company has issued an illustrated and comprehensive booklet of its machine. It is neatly printed from type cast by its method and reflects credit on this process. . . .

[With the Chadwick typesetter] the compositor can set type with both hands, or rather,

he picks up the type and drops them in a funnel. . . . Mr Merritt Gally . . . has now turned his inventive abilities towards constructing a typesetting machine. . . . Instead of casting type with liquid metal, he will produce them at the rate of 80,000 per hour by means of drop forging.

There was a rumour, too, that one new company "is instructing young lady typewriters to operate its machines, claiming that great economy will result therefrom. It would be a vast advantage to all new concerns contemplating such a course", added the *Inland Printer*, "to enquire into the Mergenthaler Company's costly experiment in this direction."

Now and again there is a worried note, even in this most sanguine of columns. The hand compositor (says one contributor) "practically finds his occupation gone when machines are installed, as there is nothing substituted. . . . Take the Thorne or Empire machines. When they are installed and placed under the working of two or three men they produce type in such quantities as to necessitate the dismissal of at least half the regular force. . . . Directories, tax lists, etc., which formerly gave additional work to thousands who were not considered regular employees of an office are now entirely machine set."

In this year 1899 the proprietor of the Hagerstown, Maryland, *Globe*, wrote to the *Inland Printer* in a towering rage: certain copies of his paper, set on his (limited fount) Lanston machines at a time when they were lacking some vital supply, had been submitted to the trade paper as specimens, by the wily agent of another machine. The bulk of the queries, of course, still had to do with what the editor of the column archly referred to as "the multiplicitous complexities of King Merg.", but there is a long and bitter protest from a proof reader on the new attitude of "let it go if it is good enough" that was being engendered by the composing machine. And to hesitant investors the *Inland Printer* spoke prophetic words, exactly 50 years ago:

Among the entire industries of the world, none presents a more favorable outlook for future business than that of manufacturing typesetting machinery. The transference from hand to machine composition will soon be an accomplished fact. . . . To the uninformed, the bulk of the trade has already been done by the Linotype Company, but to anyone who has the means to attain the knowledge of the vast number of printing offices which are yet to be supplied with means of rapid composition, it will soon become evident that the industry is but in its infancy. True, all the large and many of the smaller newspapers throughout the land are provided with machines, but their number is small when the book, job, and magazine offices and the small country dailies and the large country weeklies are taken into consideration. . . . Take any of the existing machines which are now upon the market: each and all of them are more economical than hand composition. . . . No one machine concerned can hope to alone accomplish the change. . . .

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Then in July, 1899, a patent drawing is reproduced in the *Inland Printer*, not because the minor improvement it referred to was of much importance in itself, but "because the accompanying drawing gives a very good idea of the Lanston casting machine"—a matter of furious interest to readers throughout the world. By the following month the details of the new model were patented and public. "The Lanston Monotype Machine Company of Washington, D.C., has published an illustrated booklet setting forth the merits of that machine and giving specimen pages of the types they are now making.... These varying faces now consist of a font each of agate, nonpareil, three fonts of minion, one brevier, one long primer old style, one long primer modern, a small pica old style and also a small pica modern. Each font is furnished with italics and small caps." The makers asserted that the machine embodied "a radically and fundamentally new principle", protected by unassailable patents: without them, "no person can sell a machine that sets up a line of new type, cast in a machine and spaced by a previously determined computation".



HAROLD MALCOLM DUNCAN

WHILE the Corporation awaited the arrival of the first of the re-designed machines from America, the Board laid plans for a factory which should from the first be capable of making any necessary repairs, tests and adjustments to the machines on their arrival, manufacture all supplies, and eventually make the entire machine in England. In 1899 F. H. Pierpont resigned from the Typograph Company in Germany and joined the Corporation as Works Manager in charge of technical production, with the brothers William and Frank Demming as his right-hand men. The original idea of depending upon a firm of engineers in Greenwich, on the analogy of the American Company's then dependence on Sellers

& Co., was dismissed on Pierpont's advice, and a large tract of land purchased at Salfords, near Redhill, on the Brighton line. Two large factory buildings were

put in hand; the picturesque little lake which now ornaments the grounds at the Works was formed by the excavation of clay used for making the bricks for the first buildings. Within 3 months of the founding of the Corporation, the Vice-Chairman had interviewed and engaged as Secretary one whom he spoke of later as "a rosy-cheeked young man whom I thought extremely young for the job", named William Isaac Burch, who by 1899 had justified the future Lord Askwith's choice of man for a complex and delicate job.

H. M. Duncan returned to London, and, in 1900, became Technical Managing Director of the Corporation. He was a man of education, with wide intellectual curiosity and the rare ability to grasp techniques without thinking like a technician. Before his death in 1924 he was able to see the fulfilment of his ambitious dream of typographical prestige for the Corporation and its machine: it was H. M. Duncan who called in Mr Stanley Morison in 1922 as Typographical Adviser, and empowered him to plan and supervise the cutting of what was to prove the most important repertory of book and periodical type faces ever made available at one time. It was to Duncan that the late Gerard Meynell, in 1912, turned for understanding of the problem of cutting Imprint face, when type-founders had proved unsympathetic. And it is fair to assume that on the east-bound Atlantic crossing of 1897 it was with Duncan, the former journalist and booklover, that Lord Dunraven, the former war correspondent and booklover, first struck up an acquaintance based on mutual interests.

The other two founder-executives of the Corporation are still so vividly remembered within its ranks that the form of title which is conventionally reserved for the living is still automatically attached to their names. It is always as "Mr Pierpont" that those at the Works speak of the great autocrat who created these Works and gave them their special reputation and atmosphere by refusing to tolerate any but the best technicians, the best craftsmen, the best materials and methods—and by inventing better testing and manufacturing devices than were available elsewhere. Even the youngest of those who remember him before his death in 1937 will find it easy to imagine him at the beginning of the century, when the neatly-trimmed beard was not yet white, and the precise New England voice (he was descended from one of the founders of New Haven, Connecticut) was first describing the factory that was to rise, building by building, at Salfords.

Similarly, it is as "Mr Burch" that the first Secretary of the Corporation, its

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Managing Director from 1924 to his death in 1942, is spoken of by those who served under him, and by his many friends in the printing trade. Throughout the crucial years of the first world war which were so influential upon the Corporation's future, and for other considerable periods before and after that, W. I. Burch had to take decisions on behalf of the Company as its acting managerial head; and in the early years which this article specially refers to, he had his full share of the anxieties of a growing business which in its nature demanded immense capital investment. Again and again Lord Dunraven drew upon his personal resources to tide over a crisis in the Company's affairs. There were Fridays when the non-appearance of a promised remittance from a customer meant that wages could not be paid until the next day, after Mr Burch had hurried off to secure the necessary cash from Lord Dunraven.



FRANK HINMAN PIERPONT

By 1900 the Corporation had spent close on £50,000 on plant, including a battery of punch-cutting machines which were soon to be replaced by the new punch-cutting machines designed by Pierpont, representing his improvements on the Benton principle, which are still thought of as amongst the most remarkable precision instruments known to modern industry. The Corporation's annual report for 1900 announces the completion of the factory. But the machines were not yet in regular production in America. The problem of devising machine-tools for making the different parts with such accuracy that they would be interchangeable had taken longer than anyone had foreseen; over

2000 new fixtures and special tools had had to be created. Thus it was that the year 1900 brought the new Corporation to the nadir of its hopes.

A year later (December, 1901) the long climb to success had begun. At that annual meeting, doctors' certificates were read to the shareholders to substantiate the news that Lord Dunraven was ill of a fever caught during service in the South African war, and that H. M. Duncan, having thrice struggled up from the

sick bed to which he had been brought by overwork, had been pinned down again by his doctor.*

It fell, therefore, to Henry Cust to tell the shareholders that in that year of war, when "never within memory had the book trade been so slack", the long-promised deliveries of machines had yet again been held up by a "most unfortunate hitch". A mistake had been discovered in the alinement of certain cams. "This mistake has turned out to be an extremely expensive one for William Sellers & Co., upon whom the entire loss directly falls—(Hear, hear)—but, unluckily, the error had been perpetuated throughout the entire number of machines in process of assembling up to the beginning of April before the mistake was detected...." The Corporation had received only ten machines to the end of April, 1901. But since that time installations had been made in London, Edinburgh, Manchester, Liverpool, Birmingham, Bristol, Stockport, Frome, Dunstable, Ashford, Ulverston, as well as Perth, Sydney and Melbourne. The Works were built and in operation. Matrices of English faces were already being produced, "automatically, with a variation of not more than one ten-thousandth of an inch". Not for the first or last time, the Directors waived fees totalling nearly £5000, and expressed their complete faith in the venture. The nature of the risk was candidly stated by Cust to the shareholders:

I do not know whether you gentlemen know a great deal about the printing trade.... I may tell you that printers, as a whole, are not a rich class of men, and there are probably not more than fifty or sixty establishments in the entire country, which are able to instal a new and expensive form of machinery for cash. Moreover... we have competitors who are ready and willing to strain every nerve to bar our entrance to the market, and who have accustomed the printing trade to such an amazingly generous system of finance that printers now are apt to look upon the owners of composing machines rather as fairy godmothers than as business men....

By 1902 the Corporation could count sixty to seventy installations of from one to nine machines each, and the delicate precision manufacture of moulds had been entirely withdrawn from the United States. A "very large number of new type faces" was being cut, and the scope of the machine was from "pearl to pica". In 1903 the Corporation was negotiating for an arrangement with the American Company for supplying machines to all other countries in Europe.

* "I have never seen any man... so put his very marrow in the work, and so place himself at the disposition of the work, as Mr Duncan has done on behalf of your Corporation." (Henry Cust, at 1901 Annual Meeting.)

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In 1904 a reporter from the *Printer's Engineer* paid a visit to the Corporation's Head Office at 42 Drury Lane, London, which abutted on "the new artery, the King's Causeway" (the future Kingsway), and in all the demolition work caused by driving that broad new street through ancient buildings, it was not easy for the writer to find his destination—"a four-story building in encouraging proximity to Bow Street". He noted that the premises had been very decidedly outgrown in the rush of increasing business (the move to Fetter Lane took place in the following months). He first fell over a machine destined for Pretoria, and was then "run into by a man of ruddy hue bearing a case, about as small as a grand piano, marked 'This side up—Buda Pest'". On the top floor he found a dozen keyboards in all stages of assembly "undergoing rigorous tests to ascertain whether by accident or design they were defective in manufacture, or had been damaged in transit from America". He saw a variety of specimen formes and jobs of a range unprecedented in that day for mechanical composition, and on another floor he saw casting machines "in various stages of *déshabillé*": every machine on arrival was completely stripped and reassembled by the Corporation's own mechanics. The keyboards that he saw were the "C" models of the 1899 pneumatic series, "A", "B" and "C", in which the arrangement of the keys corresponded with the arrangement of matrices in the matrix-case. Thus the first row of keys on the left hand (top to bottom) bore the narrowest characters, and those on the right the widest. When some jobbing fount was in use which was not on the "standard" matrix arrangement—e.g., in which certain characters were wider or narrower than usual—this naturally meant that the keys to make the perforations for these particular characters would have to be in different positions on the keyboard. This stumbling block in the path of typographic development gave way, in 1908, to the "D" keyboard which is to-day being operated in thousands of printing offices throughout the world. The "D" keyboard, though it remained pneumatic in action, had mechanical improvements which permitted the keys to be grouped in the universal type-writer lay.

With 1908 the pioneer days of the Monotype Corporation were over, and a new era began. The original Corporation was re-formed as a new company on the first of July of that year, and the installation of a large battery at *The Times* was one of the events that made it possible to tell the shareholders that although there had been a severe depression throughout the printing industry for the

previous 12 months (following the panic of 1907), the Corporation's sales had been better than during any previous year in its history.

In 1901 a young mechanical engineer, just out of his time as an apprentice, strolled down Drury Lane and was drawn through an open door by the irresistible sound and sight of a new kind of machine which was being tested there. He asked the Manager if there was a job going for someone with mechanical knowledge. "Can you read a mike?" demanded W. H. J. Galbraith, Manager of the Corporation; and when Percy Hinds said "Yes", he entered upon that career which finds him to-day the genial Midlands Representative of the Corporation. When such men summon up their reminiscences of the early days of "Monotype" machines, they find it impossible to convey "what it was like" until they have first broken down in the minds of their younger hearers all sorts of ideas which are so commonplace to-day that one can hardly believe they were unheard-of a generation ago. Thus the Corporation's greatest difficulty in the early days, once the machines had begun to arrive, was to find and train operators who had the mechanical knowledge, not to say instinct and second-sight, to find their way about an entirely new kind of machine with no text-book or parts-book, when it was still at that stage of production when the relative strength of interacting parts had by no means been settled and any breakage might reveal a new manufacturing problem. There could be no hard and fast line between demonstrators, salesmen and operators. Mr R. C. Elliott, whose inventive genius had already been exercised for the Linotype Company, joined the Corporation in 1901 and headed the team (informally known as "the Brains") whose work it was to solve, at top speed, seemingly endless technical problems. The gusto with which that work was attacked, and the sense of fellowship which it brought with the new "users" and operators, are alive to-day in the Technical Committee at the Works; in the friendly relations between the Corporation and the Monotype Users Association (founded 1914); and in general in that tradition of the Corporation which the Trade as a whole would probably mention first of all: the determination to maintain what is called "service"—every sort of help and advice and convenience that can be extended after the sale—with wholeheartedness.

When Mr Ernest Quick retired from the Sales Managership of the Corporation in 1945, the hundreds of letters which he received from members of the Trade spoke of friendships extending, in some cases, as far back as 1906, when he

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joined the Corporation as its West of England representative. Mr Fred Smyth, now Superintendent of the London Office, can remember the days when a man from Drury Lane might have to rush to the aid of a plant in Scotland or Wales—and be entreated to take a permanent job there. Mr Smyth has seen to the installation of machines in every country in the eastern hemisphere excepting Russia, but including the Fiji Islands. It must be remembered that the task of introducing the machines to the august, 400-year-old printing trade was being undertaken mainly by men with no special knowledge of its traditions. But in the case of the late Harry Blackett, for many years head of the Corporation's Printing Department, and of Mr William Wigg, who retired in 1940, the Corporation had the help of two wise and idealistic craftsmen who had served their time as compositors. The Corporation's School for operators was shaped and inspired by Mr Wigg.

The difficulties of the years before 1908 did not prevent the fulfilment of those unconsciously prophetic words which are here quoted from the "Enquiry" pamphlet of 1897. One by one the great book houses of Britain installed "Monotype" machines. The need to serve master printers and publishers who would "absolutely touch nothing" short of their own high standards provided a corrective to the tendency which normally handicaps gifted engineers and technicians, that of disregarding or discounting aesthetic values. The story of the typographic development of the Corporation is familiar to students of industrial design. After the cutting of its hundred and first series of matrices for the *Imprint* in 1912, international attention began to focus on the matrix-cutting side of the Works, which of course had been independent of American help (and steered toward specifically British and Continental needs) from the very beginning, 50 years ago this year. It was



WILLIAM ISAAC BURCH

not until after the first world war, from which the Corporation emerged with a greatly expanded factory as the result of its munitions work, that it at last became possible to make the far-reaching plans and arrangements for manufacturing the entire machine in England. Much of the responsibility for these arrangements fell upon the present General Manager, Mr E. Silcock.

BUT the developments of the interwar years (including the momentous growth of the display casting side, culminating in the introduction of the Super Caster, and strengthened by boldly generous display matrix lending facilities, and the gradual experimental adoption of what was then called the "extended matrix-case"), lie within the recollection of most senior master printers and craftsmen to-day. These notes have concentrated on the pre-history and earliest years of the Corporation in the hope that this or that informal phrase or glimpse may stimulate, amongst men of the pioneer generation, further recollections and anecdotes to help dramatize the contrast between Now and Then—and help to explain the extraordinary vigour and tenacity of the *esprit de corps* that animates the Corporation to-day. To the educated layman, "Monotype" machines are important because, as they developed in England and as their English-cut matrices began to exploit their unique technical potentialities, the result was something as important to the citizen at large, in its way, as would be a sudden and great improvement in the standards of architecture. If seven-eighths of the ugly, squalid and expensively-pretentious architecture of a city were to be replaced within a generation by gracious and attractive vistas, the transformation would not be more significant, or more beneficial to the general public itself, than that which actually did occur from about 1922 onwards in British book and general printing, as the result of the typographic restyling movement, made possible by the Monotype Corporation's typecutting policies. The educated citizen sees Lanston's invention, not as something that "brought in" mechanical composition, but as something which first greatly widened its scope, and finally enabled a generation of spirited designers to break down the superstitious barrier that divided "fine" from "mere commercial" printing, and eventually made a restyled timetable or periodical a matter for as much critical appreciation as was once given to the hand-printed limited editions of the Arts and Crafts printers. But what the layman does not appreciate is the significance of the fact that this change in the look of the printed word, with all its cultural importance,

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was made possible by men whose interest in "design", though keen and profound, was expressed in terms of cam and valve and lever, not of serif and kern.

The Corporation which entered into its rôle of typographic leadership after 1918 consisted of a team of men, young and old, bound together by memories and traditions of days of risk, uncertainty and, at the beginning, the heart-sickness of hope deferred. Only a machine with something great about it, something capable of seizing the imagination, could have survived such a testing time. By the same token, only men with imaginations capable of being captured by high adventure could have survived those years, and taken the early knocks as iron takes the smith's hammer upon the anvil—as a strengthening and formative grace. Men of America and Britain and (as time went on) of a score of other countries found themselves on common ground in those years; faith and determination linked buyer and seller and technician. May all who took part in that joint effort accept this invitation to contribute their own personal recollections of the early days of "Monotype" machines.

THE FIFTIETH ANNIVERSARY CELEBRATION

AT BRIGHTON, MAY 13, 1949

As The [Lanston] Monotype Corporation Limited was founded in December, 1897, it had the temporary misfortune of passing the milestone of its fiftieth anniversary at a time when post-war austerities allowed of no social festivities, and a continuing paper shortage prevented any printed commemoration. The dinner-dance which marked the fortieth anniversary had strained the accommodation of one of London's largest banqueting halls, but this year the number of members and pensioners of the Corporation, here and from overseas, had so increased that there were only two catering centres in the country capable of seating the whole party. The Brighton Aquarium provided the place, and Friday, May 13, provided the superstitious, if any there were, with that much extra reason to see to it that nothing should go wrong with the postponed and eagerly-awaited jubilee dinner. A team of stewards paid an advance visit to the Aquarium to investigate every problem involved in smoothly marshalling a crowd of 1,300 people; two skilled calligraphers at the Works volunteered to inscribe each individual ticket, envelope and place-card; and on the appointed evening, two specially chartered trains and many buses and private cars converged on Brighton.

After the dinner Mr. R. C. Elliott, proposing the health and success of the Corporation, recalled the difficulties under which the Corporation was struggling when he joined it in 1901. The Headquarters were then in Drury Lane, "at that time a depressing area: Dreary Lane would have been more appropriate". The mechanics and instructors were inexperienced and engineering friends forecast that the machine would knock itself to pieces within six months. Technical information was extremely meagre. But the business grew and became world-wide. "Instead of that inadequate accommodation at Drury Lane in 1901 the Corporation now owns huge works and a large estate, and has branch offices in many of the leading countries of the world. The Works are being doubled. Instead of two or three accountants which a wag suggested were needed to keep a check on overdrafts, we now have a crowd of them recording orders which build up our reserves; instead of a couple of dozen mechanics, this extensive Royal Aquarium room is much too small to accommodate the whole of our staff; the caster does not knock itself to pieces within six months, as there are actually many of those early 1901 machines still working and giving reliable service."

Mr. F. A. Steel, seconding the toast, spoke of the spirit of co-operation and friendship which characterized the organization, from the Chairman down to the most humble boy in the workshop.

Responding on behalf of the Corporation, the Chairman, Sir Geoffrey Ellis, Bt., first called upon all those with over 35 years' service with the Corporation to stand up. These

FIFTIETH ANNIVERSARY

seniors were then, amid cheers and applause, joined in standing by those who had served between 25 and 35 years, and then by all those who claimed over 20 years of service; by which time a considerable proportion of those present were on their feet and receiving the applause of the younger members. Speaking on behalf of the Board of the Corporation as the hosts of the celebration, Sir Geoffrey recalled the faith and confidence with which the first Chairman, Lord Dunraven, had carried the Company through its early trials. The success of the Corporation was due to the spirit of goodwill which united its members, and its continued success would be aided by free discussion on every subject on which there was something to say.

"We have got here with us to-night the men who make the machine, the men who sell it and the organization which looks after both", said Sir Geoffrey. "It is with great pleasure that we welcome our guests from overseas, who sell our machine abroad and do business all over the world, in our various branches in places like Egypt, New Palestine, Pakistan, India and Ceylon, and other countries which are wanting our machines.

"The methods of getting business are very different to-day from those in force when many of us first started. By sea and by air go the merchant adventurers to sell the goods that England makes, and one of them is here to-day in the person of Mr. Sparham, of South Africa, who has recently completed a long airline tour of many thousands of miles, as a result of which we have been able to put down machines in the middle of the Congo forest and over various parts of Africa wherever we find the demand".

Sir Geoffrey read a telegram from Lord Ramsden, Deputy Chairman, who was unable to be present but sent congratulations and felicitations on the "splendid team spirit" of the Corporation.

Mr. E. Silcock, General Manager, reported that messages of congratulation had been received from many countries in Europe, South and North Africa, New Zealand, Australia and the Near and Far East, as well as one which he read from Mr. J. F. Costello on behalf of the independent, but associated, Lanston Monotype Machine Company of the United States. Foreign representatives were present from Norway, France, Germany, Switzerland, Denmark, Spain, Italy, Belgium, Sweden, Holland, Finland and South Africa. They would take back with them cordial good wishes to their staffs in their own countries, and the good wishes of the assembly would also go out to those in Australasia and the Far East, Egypt, and other territories whose representatives had been unable to be present.

Mr. Silcock then spoke of the active personal interest which Sir Geoffrey Ellis as Chairman of

the Board of Directors had taken in the human, as well as industrial and financial affairs of the Corporation. On behalf of many friends in the Monotype Corporation he presented Sir Geoffrey with an inscribed silver cigarette box "with the hope that his wisdom, knowledge and understanding might be available to us for many years to come".

Mr. Harold Macmillan, M.P., one of the Directors, in an impromptu speech proposing the health of the Chairman and Mr. Silcock, recalled the days during the late war when 90 per cent. of the Corporation's output was devoted to the making of munitions, when the output, precision and accuracy of that work was rated as amongst the highest of the engineering firms in England.

During the rest of the evening, while the younger members danced, there were many informal reunions with members now in retirement who remembered the pioneer days.

ALPHABETS OF EHRHARDT

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THE FIFTIETH ANNIVERSARY CELEBRATION, MAY 13TH, 1949



Three of the Representatives and (RIGHT) some of the "Old Timers" arriving at the Brighton Aquarium.

BELOW: At the top table: Mr. H. L. Buckle, O.B.E., Mr. E. Quick, formerly Sales Manager, and Mr. Percy Hinds.

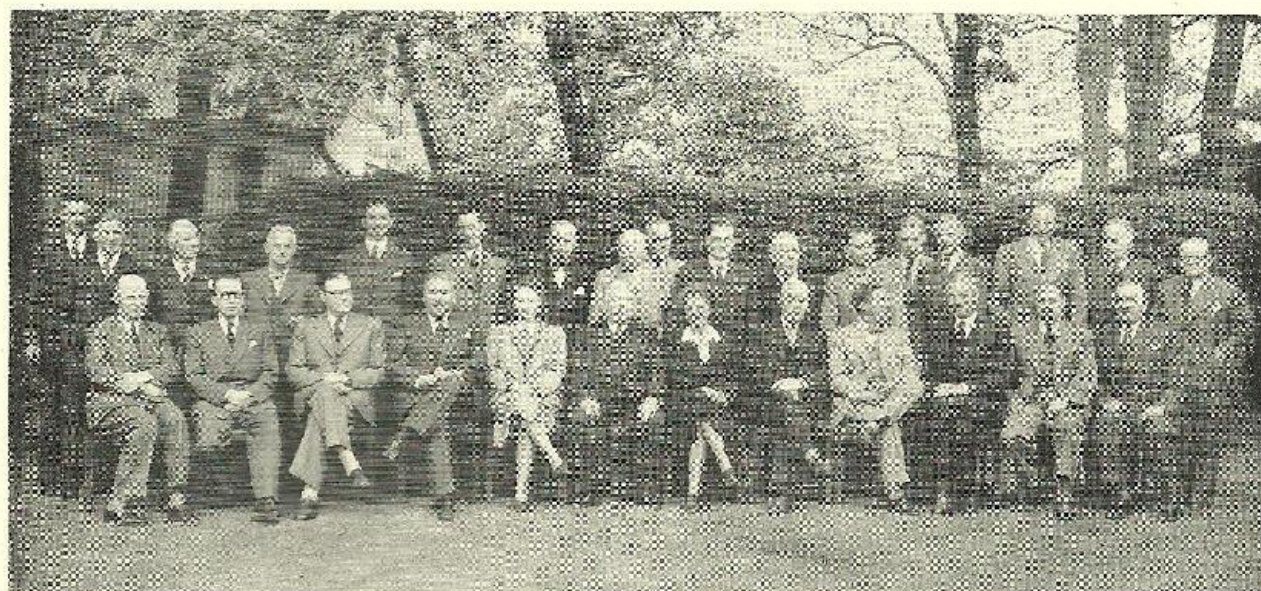


Mr. R. Potter, Mr. H. Beaufort-Jones, Mr. W. R. Alston.



Mr. W. Peters, Mr. W. Gooch, Mr. H. Bishop.

BELOW: CONTINENTAL REPRESENTATIVES WHO WERE PRESENT AT THE DINNER



Mr. E. Silcock, General Manager (seated centre) and other members of the Corporation's staff photographed with Representatives and Agents from Amsterdam, Basle, Paris, Brussels, Copenhagen, Helsinki, Frankfurt, Stockholm, Oslo and Rome.

THE FIFTIETH ANNIVERSARY CELEBRATION, MAY 13TH, 1949



Mr. R. C. Elliott proposed the health and success of the Corporation.

BELOW: One of the specially chartered trains sets off from Victoria.



Mr. F. A. Steel, Mr. Harold Macmillan, M.P., and the Chairman (Sir R. Geoffrey Ellis).

A FLASH-BACK TO ANOTHER SEASIDE EXCURSION: HASTINGS, 1906



Front row: (1) H. Blackett, (3) W. Daniels, (7) C. Strickson, (8) M. Luther, (11) W. Sterling, (12) E. C. R. Spiers. Second row: W. J. H. Calbraith (first to right of pillar), W. Wigg and C. R. Macaulay (in doorway), Russell Reid (left of second pillar), W. Seeds (above Mr. Sterling).

THE MONOTYPE CORPORATION LIMITED

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<i>China</i>	The Monotype Corporation Ltd., 17 The Bund, Shanghai
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<i>Holland</i>	The Monotype Corporation Ltd., Keizersgracht 142, Amsterdam C
<i>Hungary</i>	Offenberger Miksa, Dalmady Gyözö ucca 7, Budapest IV
<i>Iceland</i>	Snæbjörn Jónsson, 7 Holtsgata, Reykjavik
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