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OF CRANDALL DATES AND SINGLE ELEMENTS

Lucian Stephen Crandall secured a patent in 1879 for a typewriter that seems to exist nowhere but in the Smithsonian, suggesting that the first Crandall was not mass produced. It is a certainty, however, that a typewriter called the Crandall New Model was produced; for with its graceful lines beautifully adorned with gilt decorations and hand-painted flowers and mother-of-pearl inlays, it is a popular item among collectors. What falls into dispute is the year of the New Model's genesis. The catalog of the London Science Museum, which refers to this machine as the No. 3, dates it at 1893; the Milwaukee Public Museum catalog dates it at 1879. Should the curators of the two collections choose up sides in fisticuffs? Perhaps we could settle the disputed 14 years more reasonably.

Stated bluntly, the London source is wrong, though this hardly makes Milwaukee right. When London refers to a No. 3 Crandall, it has in mind a typewriter that was labeled "Universal Crandall No 3" which was a substantially different machine from the New Model (and the New Model is the machine they illustrate). As for Milwaukee's 1879 date, this seems appropriate for some Crandallprobably the one in the Smithsonian-but not for the New Model. Pinpointing the date of the New Model's appearance is difficult, but collector Paul Lippman owns a Crandall letterhead showing the New Model and the date 1884; meantime, advertisements abound depicting the New Model's existence in 1887. The upshot becomes that the machine is older than London claims, and almost certainly younger than Milwaukee claims.

As for the Universal Crandall No. 3, the Milwaukee catalog dates it at 1906. Advertisements demonstrate, however, that this date is 11 to 13 years late (although the Crandall Visible No. 4-nearly identical to the Universal Crandall-may hail from that year). In short, the museum catalogs become universally sloppy about the genesis dates of Crandall machines.

One reason it would be enjoyable to pinpoint the original year of Crandall mass-production is for the plain fun of tweaking IBM, who would happily let us believe they invented the single-element or "golf ball" printing head present in their Selectric line of typewriters. All the Crandall machines mentioned so far were single-element typewriters. Regardless of whether the New Model came out in '79, '93, or anywhere in between, this "very latest thing" of modern typewriters was in mass production at least 85 years ago, maybe 99.

And the single-element principle became mass-produced in dozens of different makes, including several extremely popular and long-lived. The single-element Hammond made its debut sometime during 1880-84 and was on the market for nearly a half century before changing its name (but not dying out). The Munson was on the market by 1889, and, under a succession of names from 1898-including Chicago, Baltimore, Ohio, Galesburg, Conover, Draper, Yale, and Mizpah*-it remained in production until about 1917. Of the ubiquetous Blickensderfer typewrtier (1893-c. 1919) about 200,000 appear to have been made in its home factory in Connecticut, while the additional numbers of those made under license in European factories has not been tabulated.

Though these and several other single-element designs were quite successful, the typebar machines ultimately ousted them for several decades following the teens. The single-element

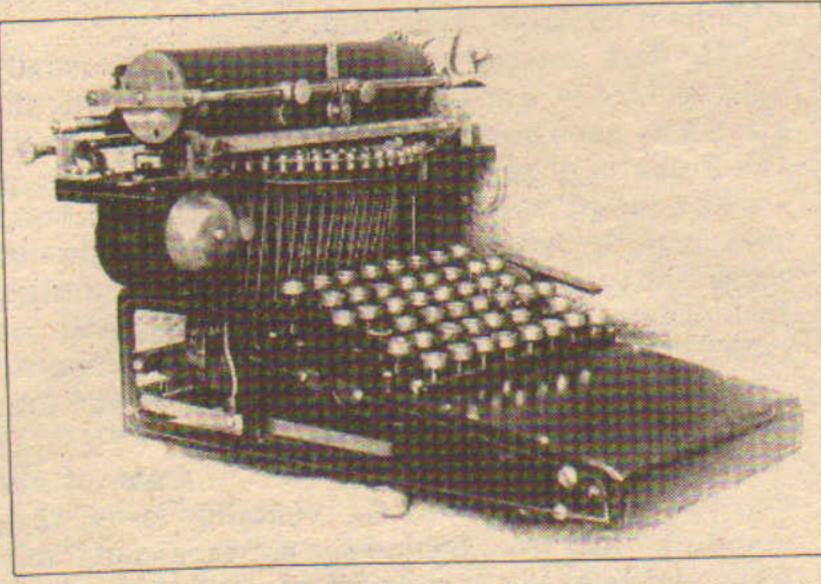
*This is the first known published reference to a

typewriter called Mizpah. It was supposed to be a

reverse-carriage [left-to-right travel] version of the

Chicago that printed from a Hebrew type element.

decian was manufactured.



Caligraph No. 1: Upstrike Typebasket. "Bird cage" between keyboard and carriage identifies machines writing on underside of platen. Shown: Caligraph No. 1, 1880.



Sholes & Glidden: Upstrike Typebasket. Carriage raised on its hinges revealed writing in upstrike designs. Shown: Sholes & Glidden Type Writer, 1873.



Though an instruction book for such a machine is in the author's collection, its photo of the Mizpah Bar-Lock No. 6: Anterior Topstrike Typebasket. One typewriter is heavily retouched and there is no of the few visibles with a double-keyboard was the tangible evidence that this modification of the Bar-Lock of c. 1888. Shown: No. 6 of the mid-1890s.

Pittsburg Visible: Frontstrike Typebasket. First appeared in the Daugherty of 1890. Shown is second model, renamed Pittsburg Visible in 1898.

machines could not be run quite as fast as the fastest typebar machines; they are, however, visible writers, and, because their mechanisms were simpler, they could be sold at lower prices. These characteristics recommended them less to the professional typist than to the home or small business user. These markets became most aggressively pursued during the second and third decades of this century, by which time faster frontstrike typebar portables had been widely developed. As an illustration, Remington reissued the Blickensderfer in 1928 as the Rem-Blick. Though once the undisputed leader among "personal" typewriters, the resurrected design was by then so archaic that it vanished after a year or

Yet as noted earlier, 1927 was the year when the single-element Hammond merely changed its name. Now the Vari-Typer, it abandoned its role of office correspondance machine and was marketed as a low-cost typesetting machine instead. In that capacity it remains on the market today. Modern Varitypers have an external appearance different from that of the Hammonds, they are electrified, and many accessory features have been added. But beneath their cover panels is exactly the same mechanism that James Bartlett Hammond brought to the market nearly a century ago. The most expensive single-element typewrtier of its era, the Hammond design is distinguished not just because it is the longest-lived writing machine; it appears to be perhaps the single mechanism mass-produced continuously and without alteration longer than

any other. Just as there were functional differences in the way typebar machines got words on paper, so there were in single-element devices. Some printed from typewheels (Blickensderfer) similar to IBM's golf ball. Others from horizontal cylinders (Munson) or vertical cylinders (Crandall), while yet others had the characters moulded upon curved plates or part-wheels (Hammond).

In some, the printing element advanced against the paper to make the impression (Blickensderfer, Crandall, Postal, etc.) in much the same fashion that today's IBM does. But in many others a hammer or mechanical finger behind the carriage sprang forward to pound the paper against the type (Hammond, Munson, Commerical Visible, etc.). In most the action of the printing element was simply to rotate to bring the desired character into position, but in the Munson and its successors the cylinder also slid side to side along its track.

Most typewriters of the age were spring-powered. However, George Canfield Blickensderfer invented and manufactured a single-element machine that was electrically powered. The IBM Selectric and its modern counterparts may have resurrected a dormant concept, but nevertheless the Blickensderfer Electric existed during the first decade of this century.

Note: The author would be happy to answer readers' questions about old typewriters. You can write him care of THE ANTIQUE TRADER WEEKLY. Please include a self-addressed, stamped envelope for a personal reply.

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