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Joseph Thorne and the Typesetting Race

The second half of the nineteenth century saw the acceleration of a race to develop a typesetting or casting machine. For four hundred years virtually all printed matter, from books to newspapers, was tedi-

ously set one letter at a time with metal letters and then returned to their case one letter at a time after they were printed from. In the days of Gutenberg this process marked a revolution in comuunication and learning, but the same process four centuries later impeded the advancement of knowledge and literacy. Keep in mind that the average daily newspaper for the largest cities in the world, such as London, were only eight pages on average.

This typesetting race, as I like to refer to it, lasted well overfifty years, involving dozens of participants. The contest was rightly won by Ottmar Mergenthaler in 1886 with his Linotype machine, later to be introduced into every major

country. Coming in second was Tolbert Lanston with his Monotype machine. For various reasons Lanston's Monotype was preferred for bookwork and Mergenthaler's Linotype for newspapers. Behind these two machines fell all the others, each with varying levels of success in solving the problem of setting type.

One of the other machines that remained an active competitor for over 20 years was the Thorne Typesetting Machine, later known as the Unitype. The Thorne was invented in 1880 and made available to the industry later that decade. By 1903, over 1,500 machines had been produced. It is amazing to consider that this simple machine remained competitive in the marketplace at a time when the type-

setting race had already been won by the Mergenthaler's Linotype machine.

Both machines took radically different approaches to the problem. The Linotype was a line-

caster, producing bars or lines of type from brass matrices, while the Thorne was a typesetter, actually setting and distributing pre-cast foundry type mechanically. From the earliest years of the race, the prevailing thought and logical approach was to invent a machine which would replace or minimize the human element: a machine which would set and distribute type. After little success in attempting to solve the problem in this fashion, inventors later switched their efforts to a machine which would cast the type. The Thorne Typesetter was the only commercially successful machine of the former group.

This marvelous machine was the invention of Joseph Thorne of Hartford, Conneticut. The Thorne Typesetter had two cast cylinders, one on top of the other, each 15" in diameter. Ninety channels or grooves were cut into the cylinder around the circumference with each groove being the depth and width of a piece of type. Each groove was fitted with a special arrangement of notches which correspond to matching nicks on a piece of type. The nicks on the type look similar to the nicks on regular foundry type, except that no two characters have the same number or position of nicks.

The upper cylinder distributes the type while the lower holds the type and then sets it with the aid of a keyboard. As a piece of type revolves around the distributing cylinder, it drops or "distributes" into a

