

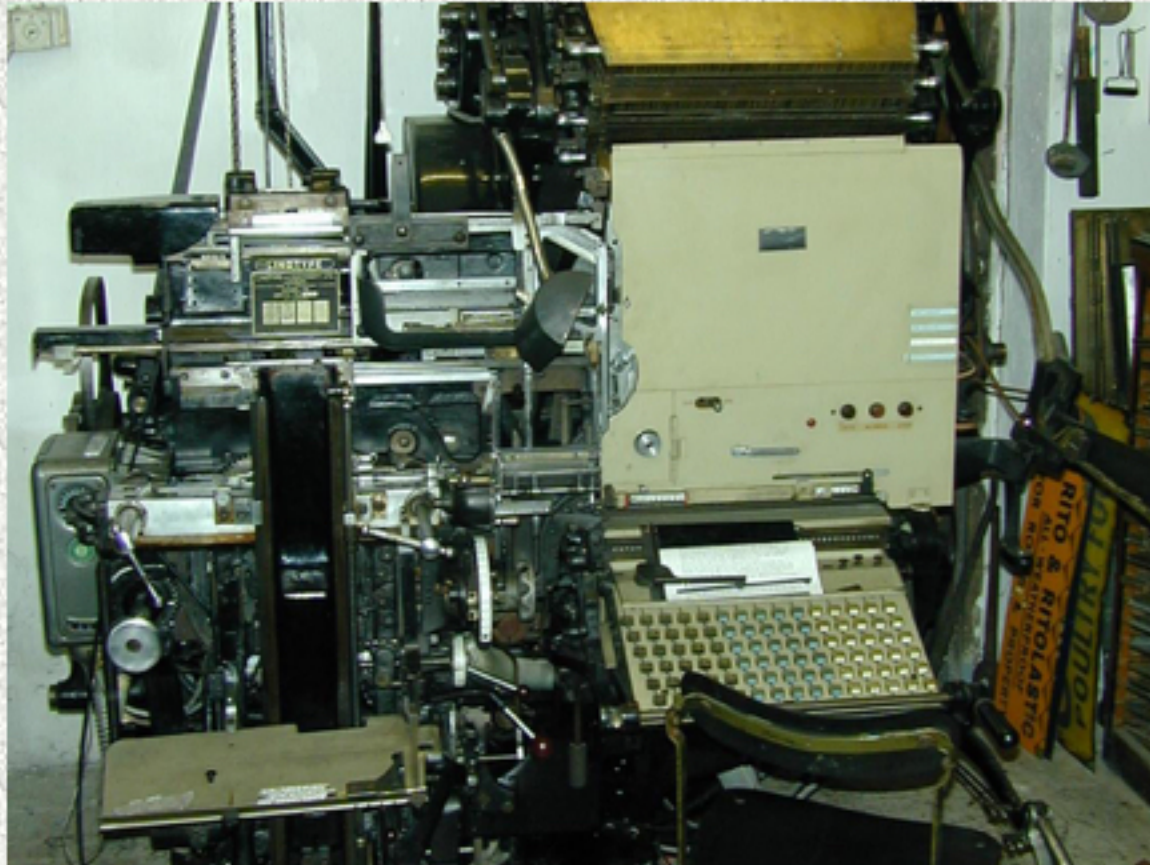
# Typographic Technology

*From Hot Lead to Emojis*



## **Metal Movable Type, 1450**

Slow, heavy, labor intensive and expensive (had to purchase individual fonts). Over 400 years until next innovation. Still used today as craft.



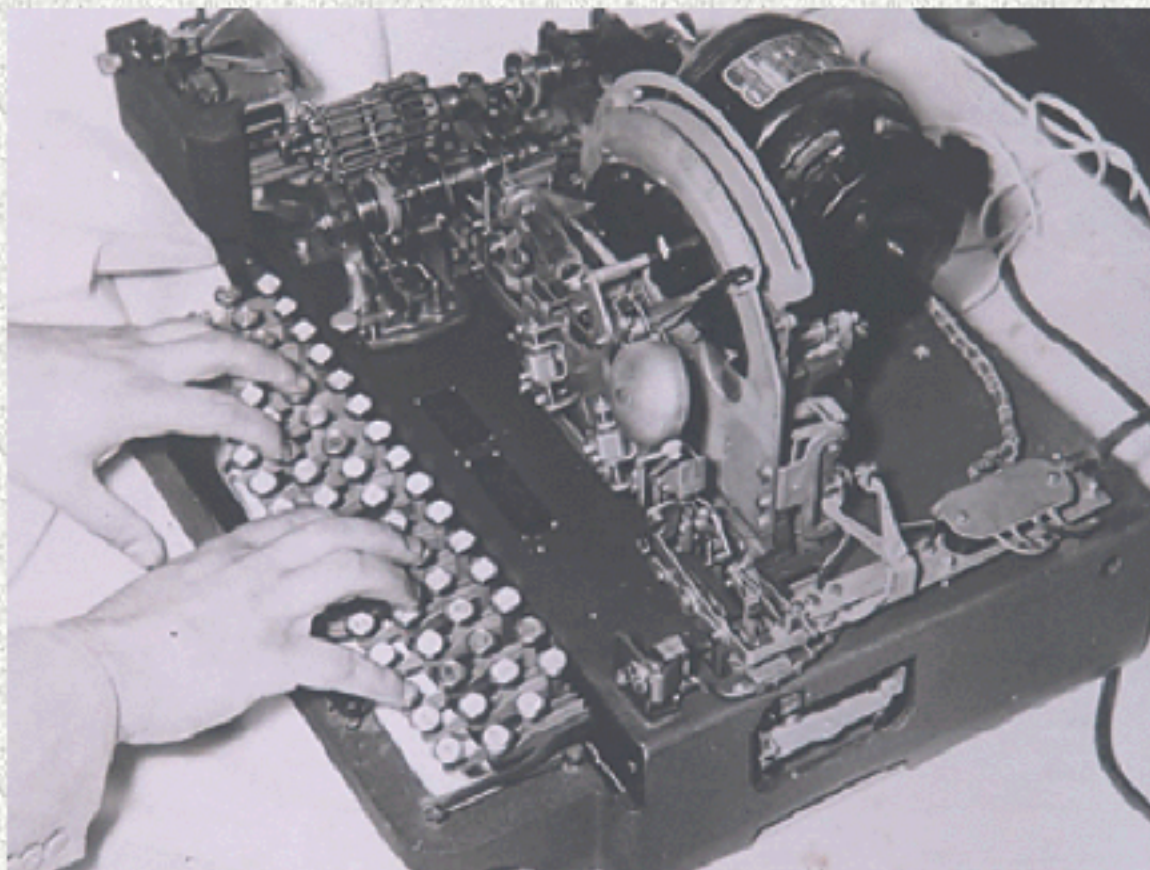
## **Linotype, 1886**

Used molten lead and matrices to form whole lines of type at once. Keyboard input was faster and more accurate than handset.



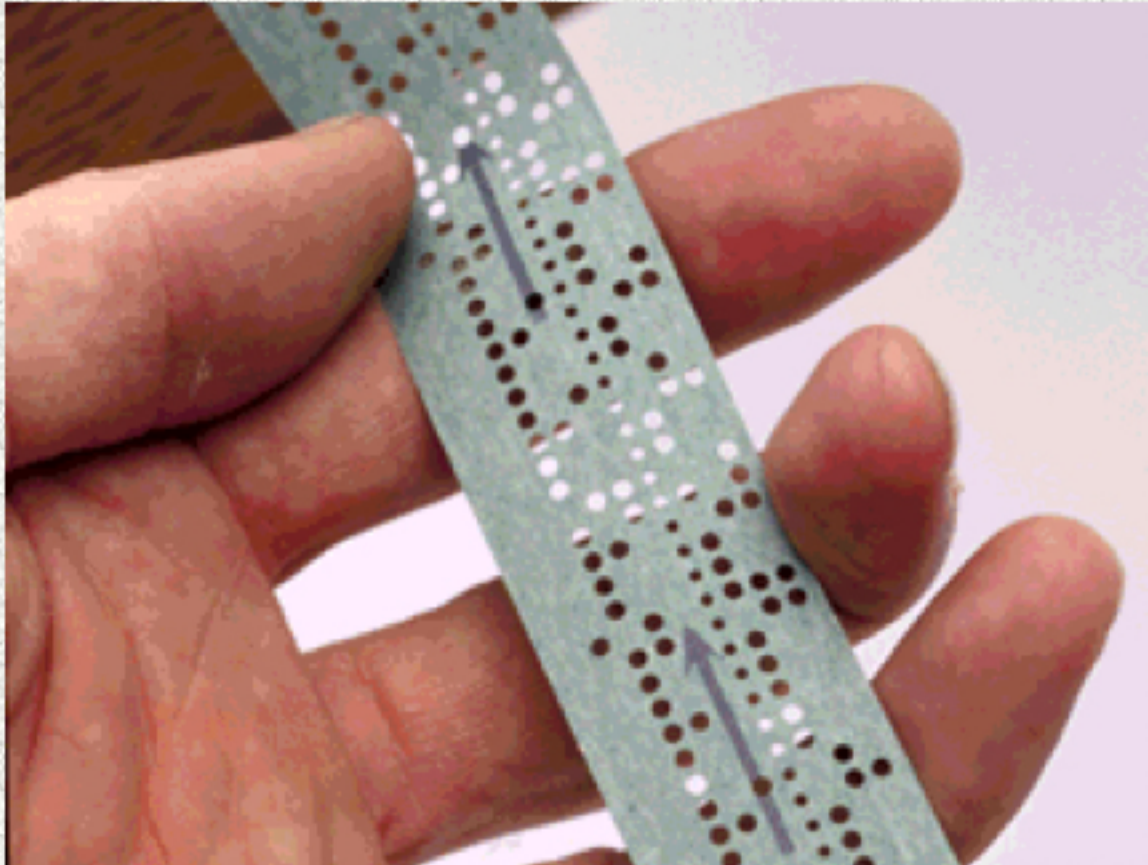
## Linotype slugs

Individual letters didn't have to be returned to case.  
Lead was melted and reused.



## **Teletypesetter, 1928**

A typewriter-style machine attached to the Linotype, it produced a perforated paper tape which gave directions to the machine.



## Teletype tape

Instructions could be transmitted long distance by wire, which made it useful to news organizations.

A Machine in Two Parts

MONOTYPE

MARVELS of the MONOTYPE and Its TYPE-CASTER

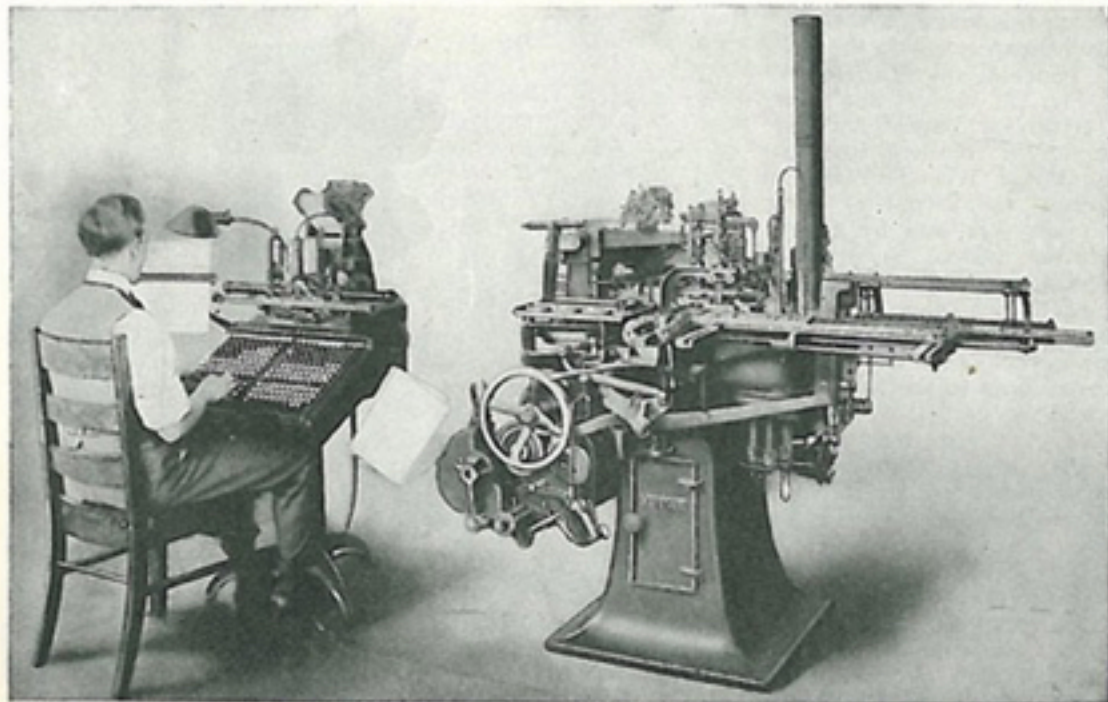
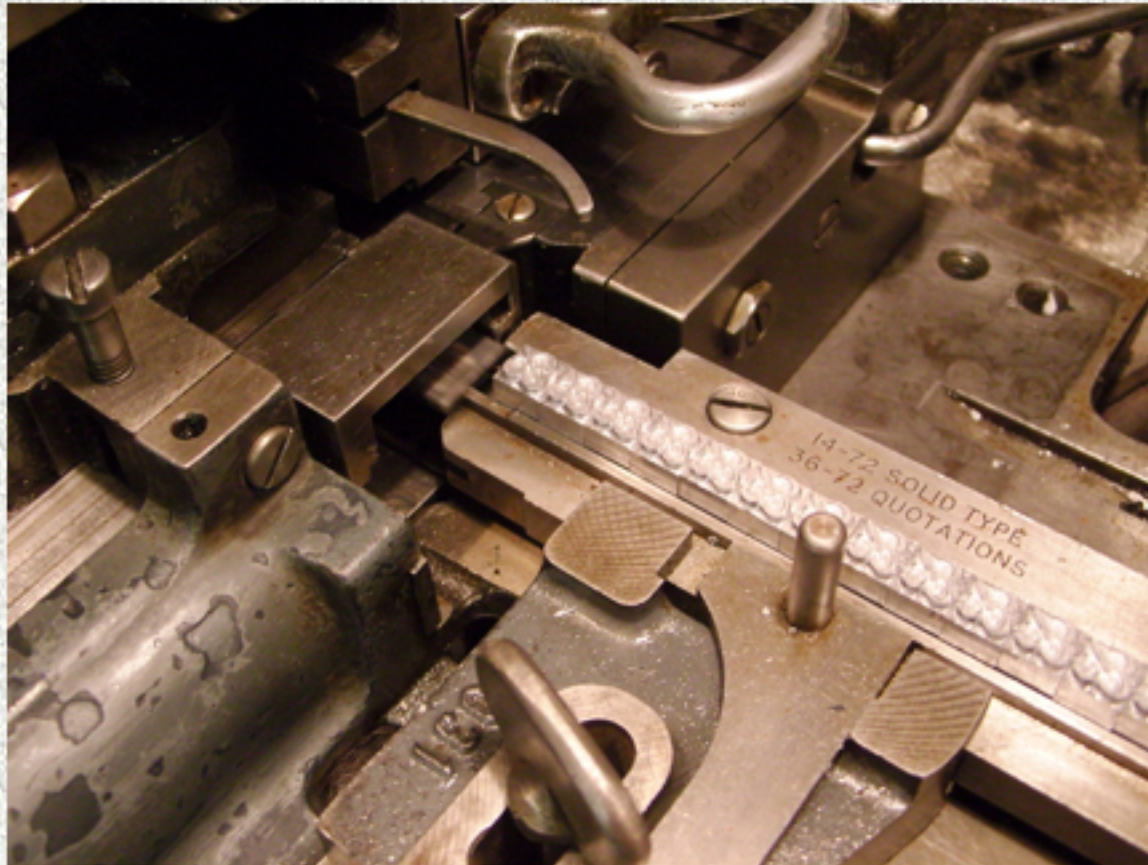


Fig. 1.—Monotype Keyboard.

Fig. 2.—Monotype Casting Machine.

## Monotype, 1887

Several operators could use it at once, and it was relatively fast.



## **Monotype letters**

Cast individual characters, instead of lines, from molten lead.  
Corrections could be made on single letters instead of entire lines.





## Ludlow

This machine used a combination of hand-setting and automated typesetting in a slow process.



## Phototypesetting, 1960s

Experimented with in the 1800s, it really took off in the 1960s. Referred to as “cold type” because type was generated by a photographic process instead of hot lead.



### **Phototypesetting advantages:**

Unlimited characters, cheap, flexible, fast. Corrections were easy to make. No heavy metal type to move.



### **Phototypesetting advantages:**

Combining a keyboard, computer, and eventually a CRT screen, large blocks of type could be set at once, and eventually, entire pages. Type was pasted onto grid sheets, along with art, to make printing plates.



## Digital Typesetting, 1980s

Combining computers, CRT screens and laser technology changed typesetting significantly, making it faster and more flexible than ever before. Entire pages could now be designed, and corrected, on a desktop.



## Digital Printing

Laser imaging revolutionized the creation of printing plates. It is now possible to go directly from the desktop to the press.



## Revolutionary Evolution

Thousands of fonts can now be stored on a computer as electronic data, rather than as metal pieces or on film. Contemporary hardware and software has made it possible to create special effects and animation of type like never before. No more paste up.



## Interactive Type & Mobile Devices

As the digital revolution moved from print to screen the role of type expanded. Text can now be links that help you navigate the web or apps. Responsive design means that designers must now consider various screen sizes when creating work that will be viewed on mobile devices.