

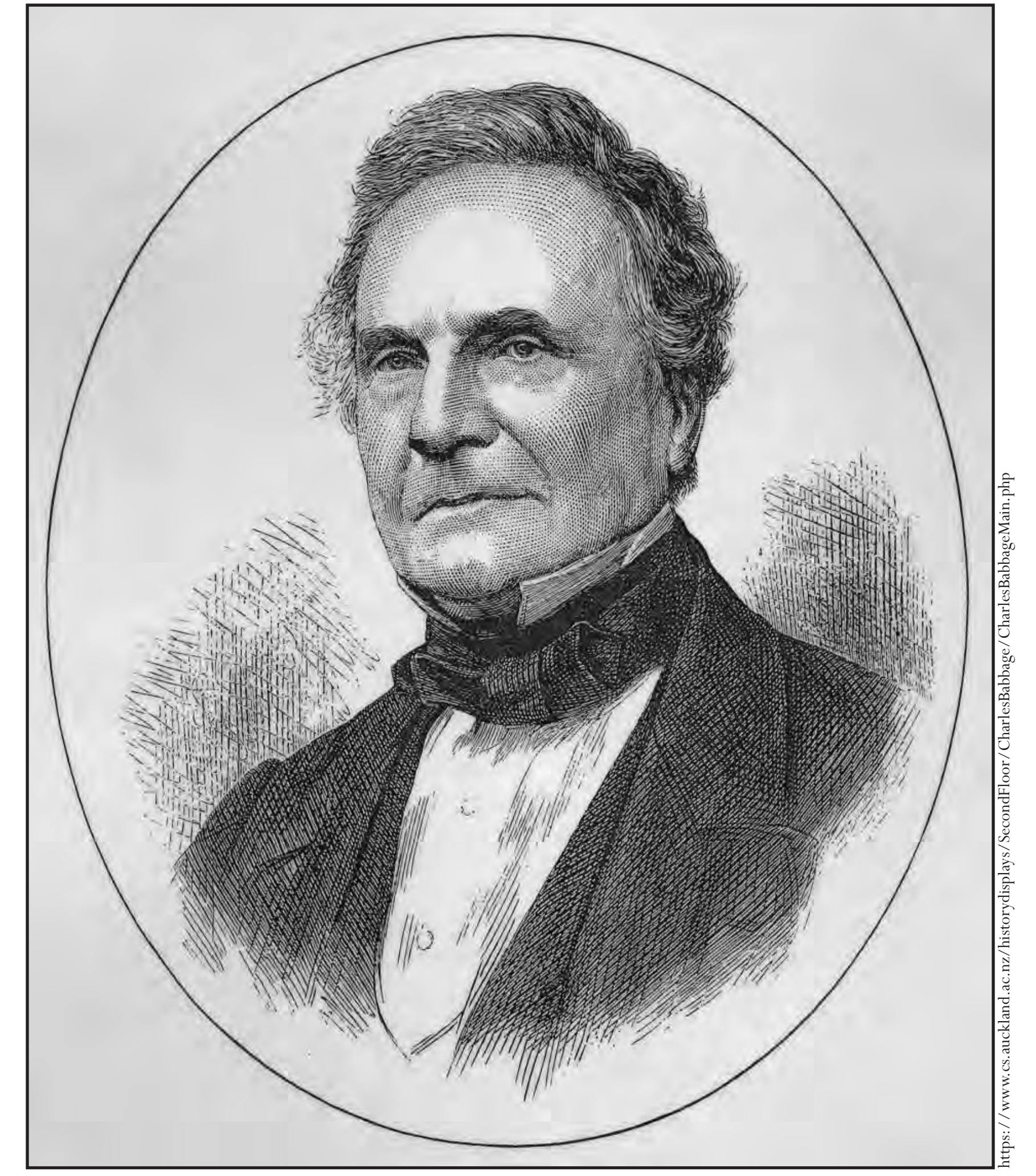
Ada and the Engine

A play by Lauren Gunderson

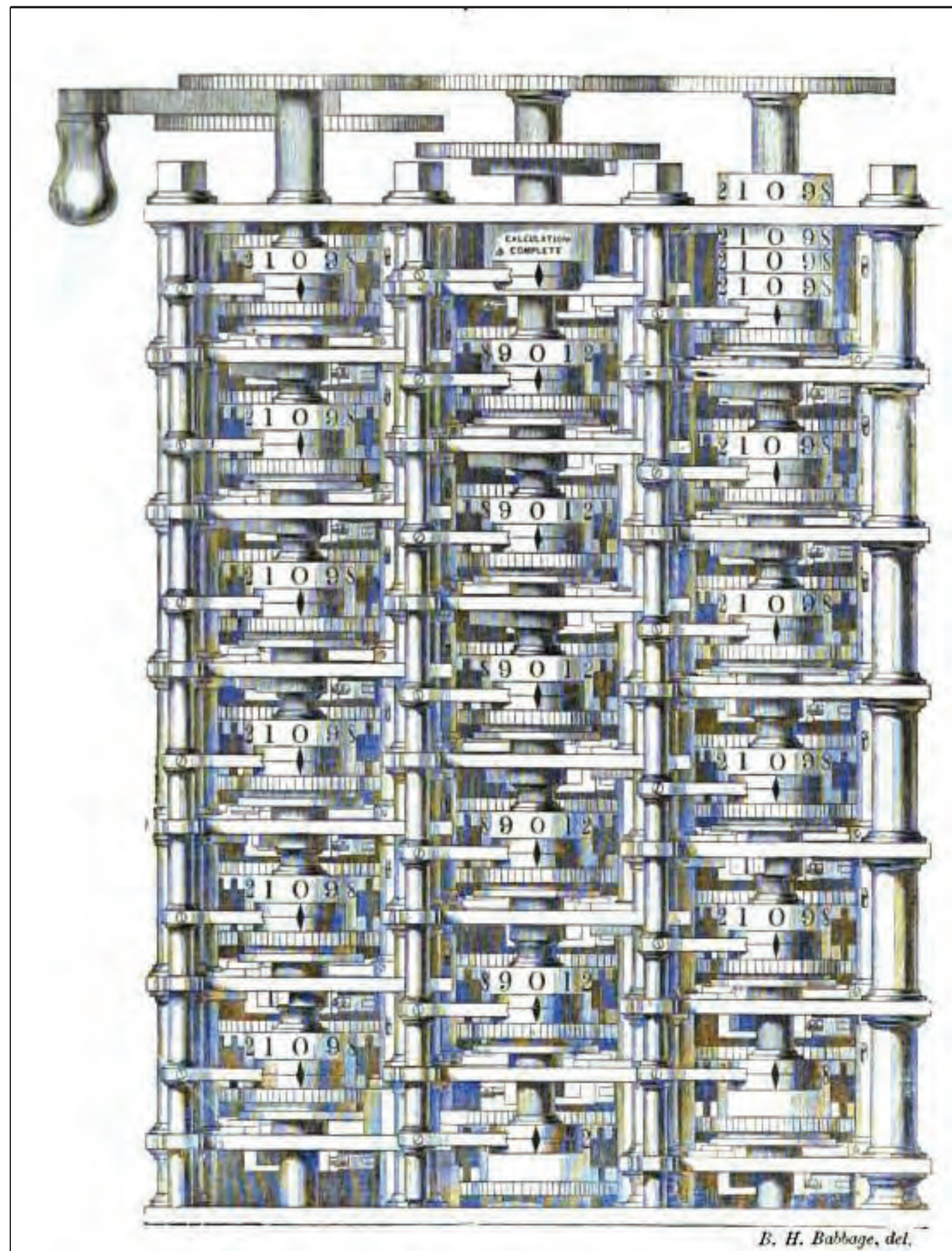
Realized Scenic Design by Savannah Hurst

Ada and the Engine tells the story of Ada Lovelace as the British Industrial Revolution dawns in England. Ada meets Charles Babbage, a noted mathematician, inventor, and mechanical engineer, and together they invent the Analytical Machine. This machine is the world's first functional computer using punch cards for programming. Lauren Gunderson notes that the action takes place during the Victorian Era in the houses of intellectual elites. Keeping Gunderson's notes in mind, the design took a modernist approach. In thinking about how the evolution of the machine mirrored the ebb and of the character's relationships and served as both focus of and metaphor for the play, the design concept placed the action of the play within the analytical machine itself.

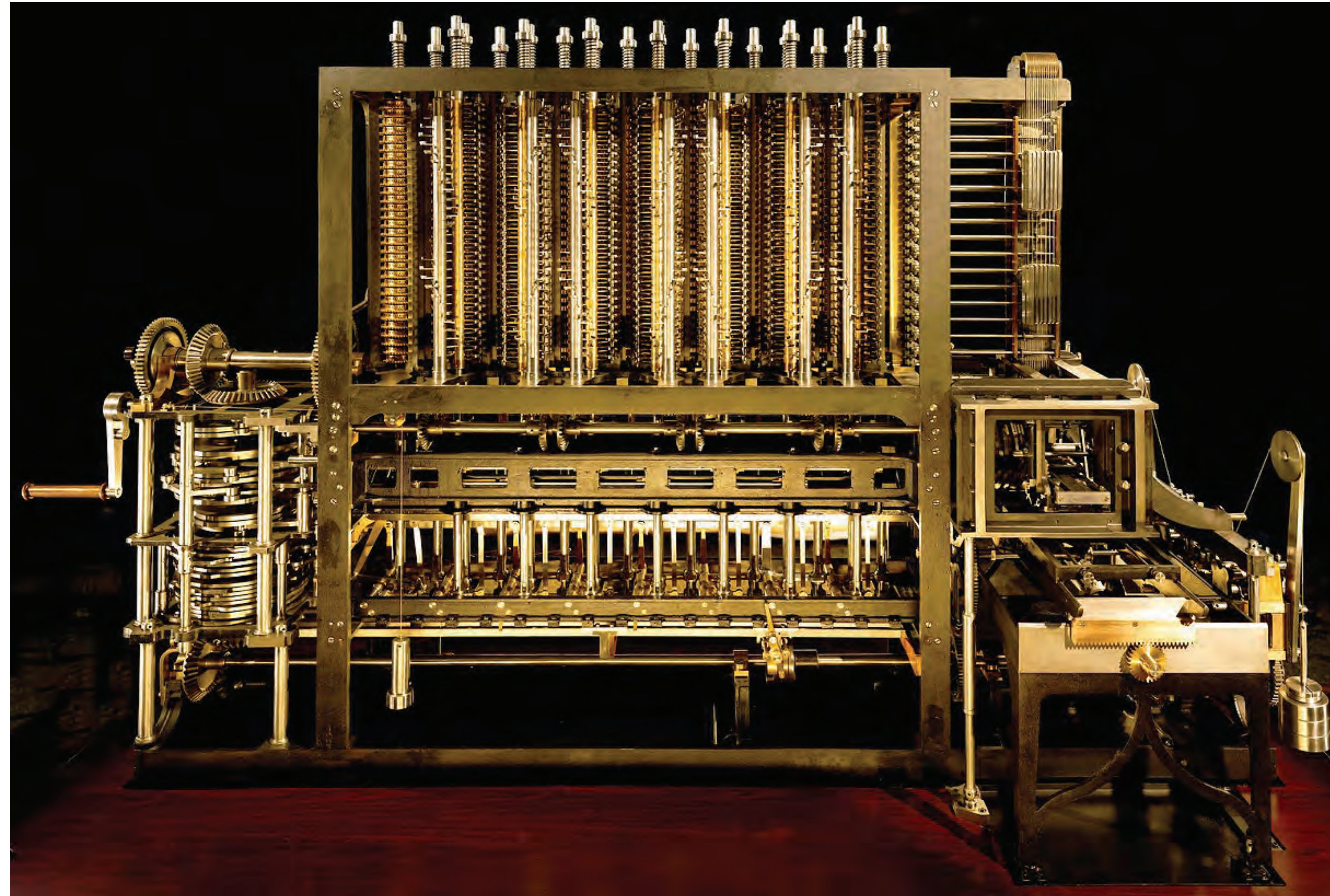
At the end of the script, the machine comes to life, engulfing Ada and her reality in music and machinery. Ada begins to command the machine by singing. To visualize the operation of the Analytical Machine, mechanical pulleys and cranks were incorporated within the design. The large columns upstage rotated 360 degrees, the vertical stacks behind the columns moved up and down, the burgundy gear centered upstage turned on a motorized turntable, and the grey-toned crank placed downstage left was cranked manually. Black light and glow paint were used to add to the visual spectacle effect at the very end of the play.



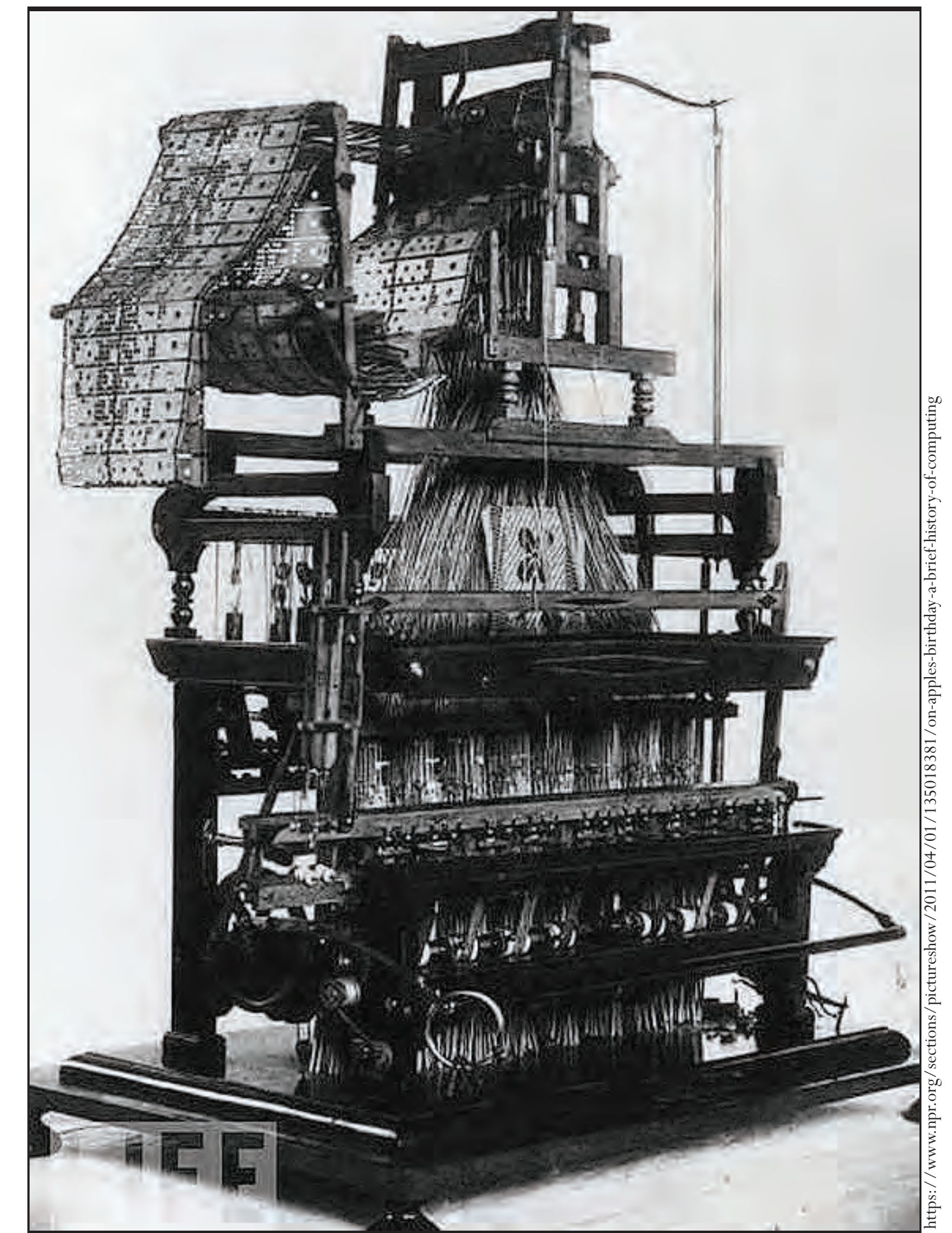
A Portrait of Charles Babbage (1792-1871)



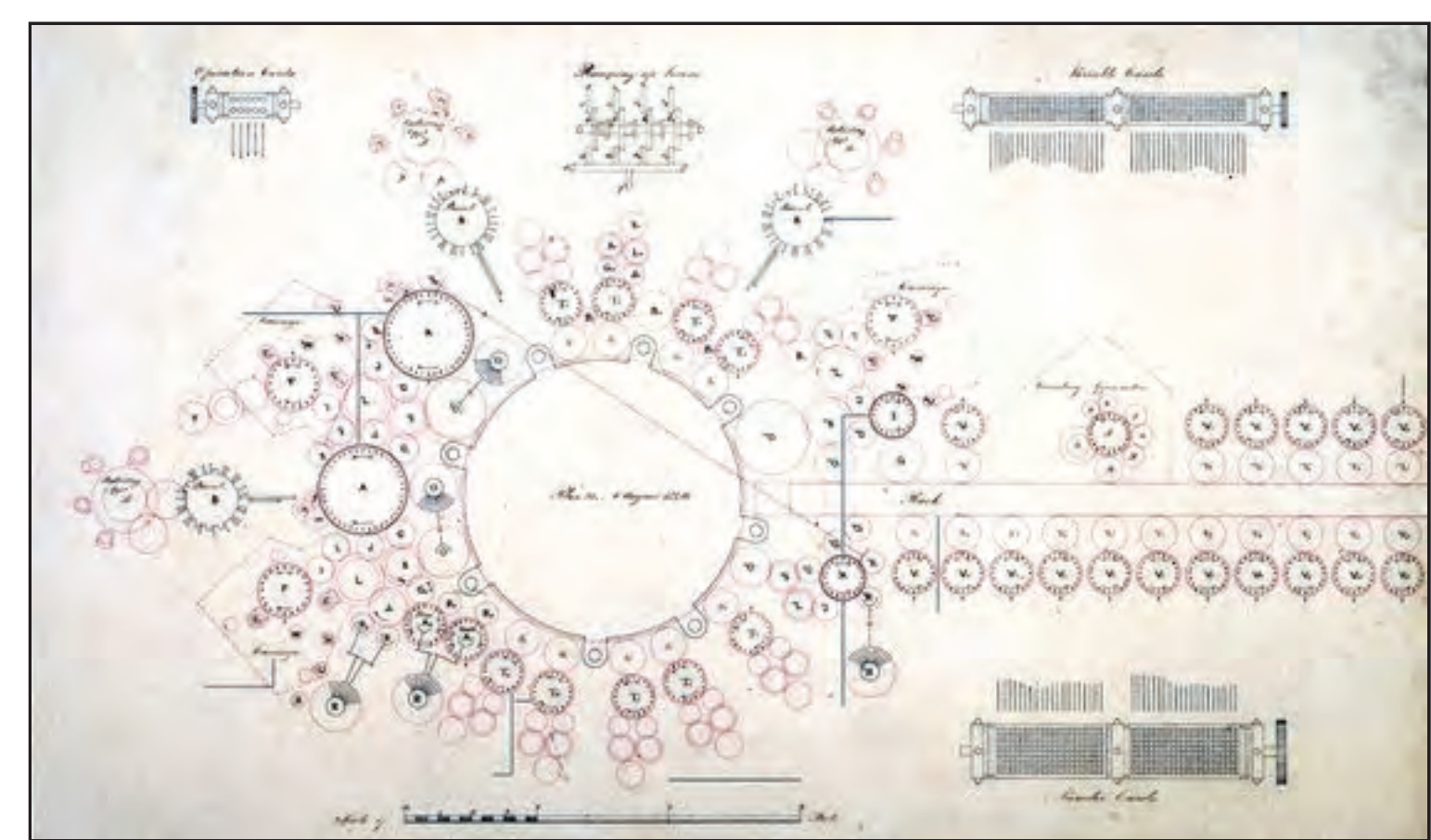
Engraving of Charles Babbage's Difference Engine



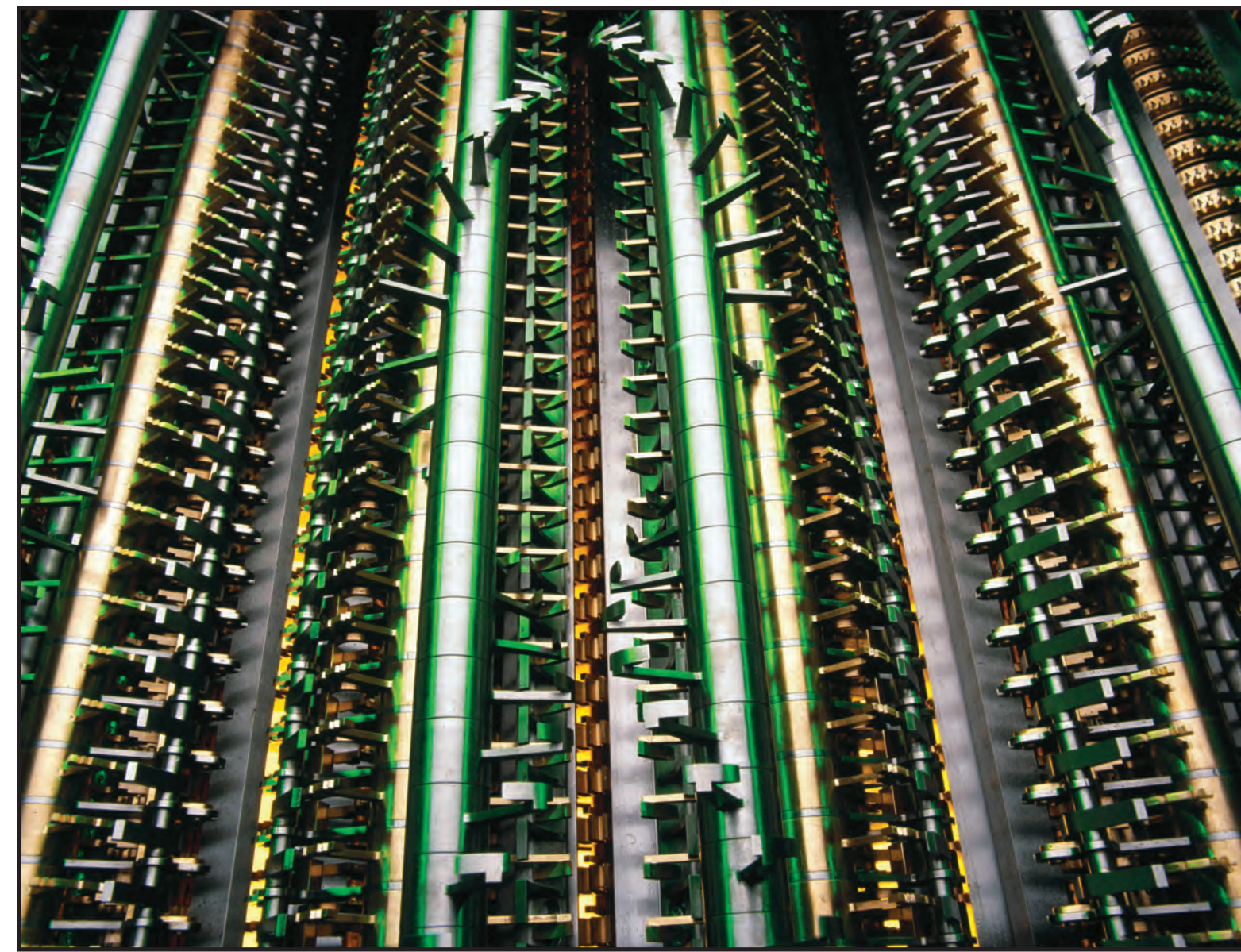
Charles Babbage's Analytical Engine



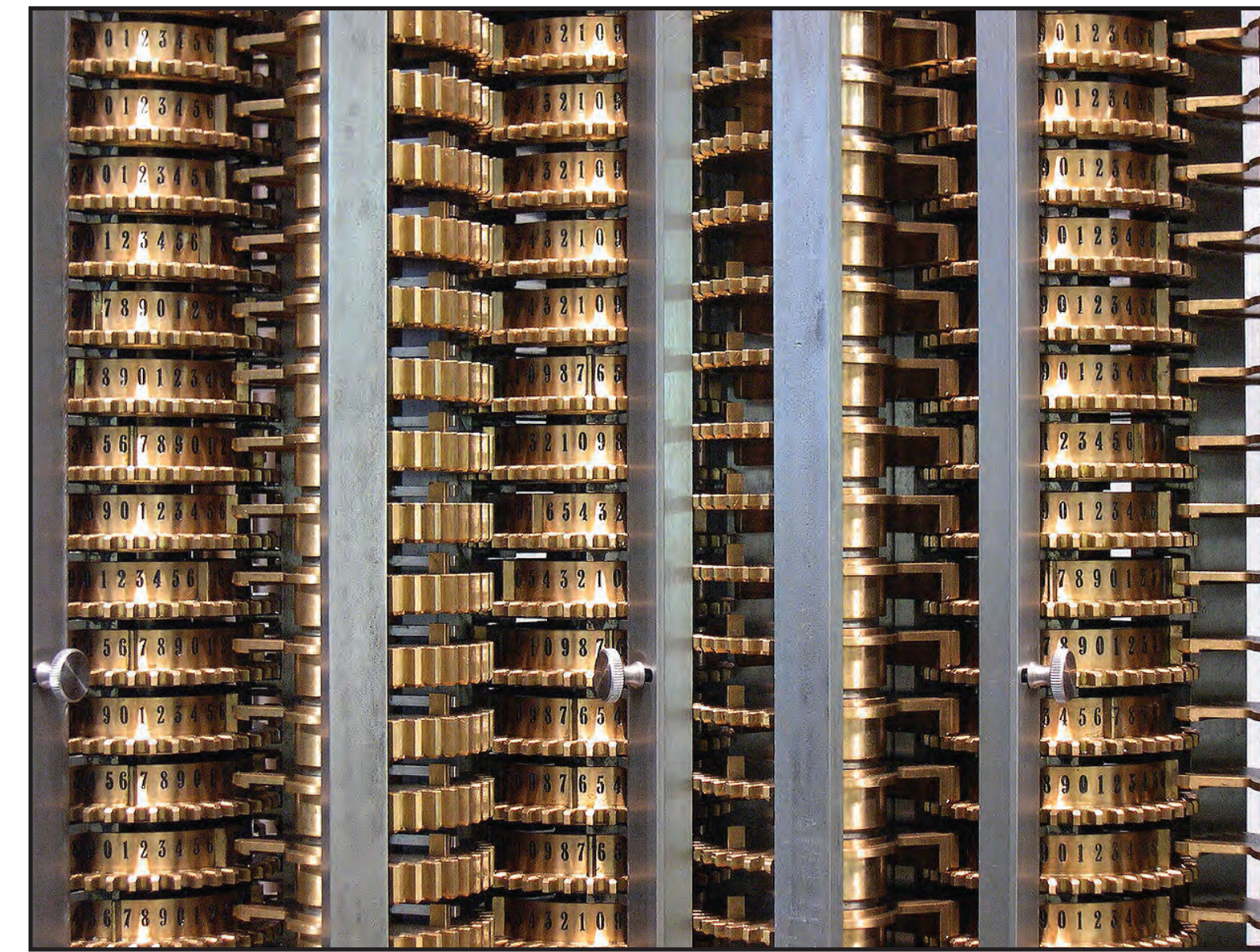
Joseph Marie Jacquard designed this weaving loom in 1801. It was the first machine to use punched cards to control a series of sequences- a key step in Babbage's development of computer programming



Analytical Machine Blueprint



Back Side of Analytical Machine



Front Side of Analytical Machine



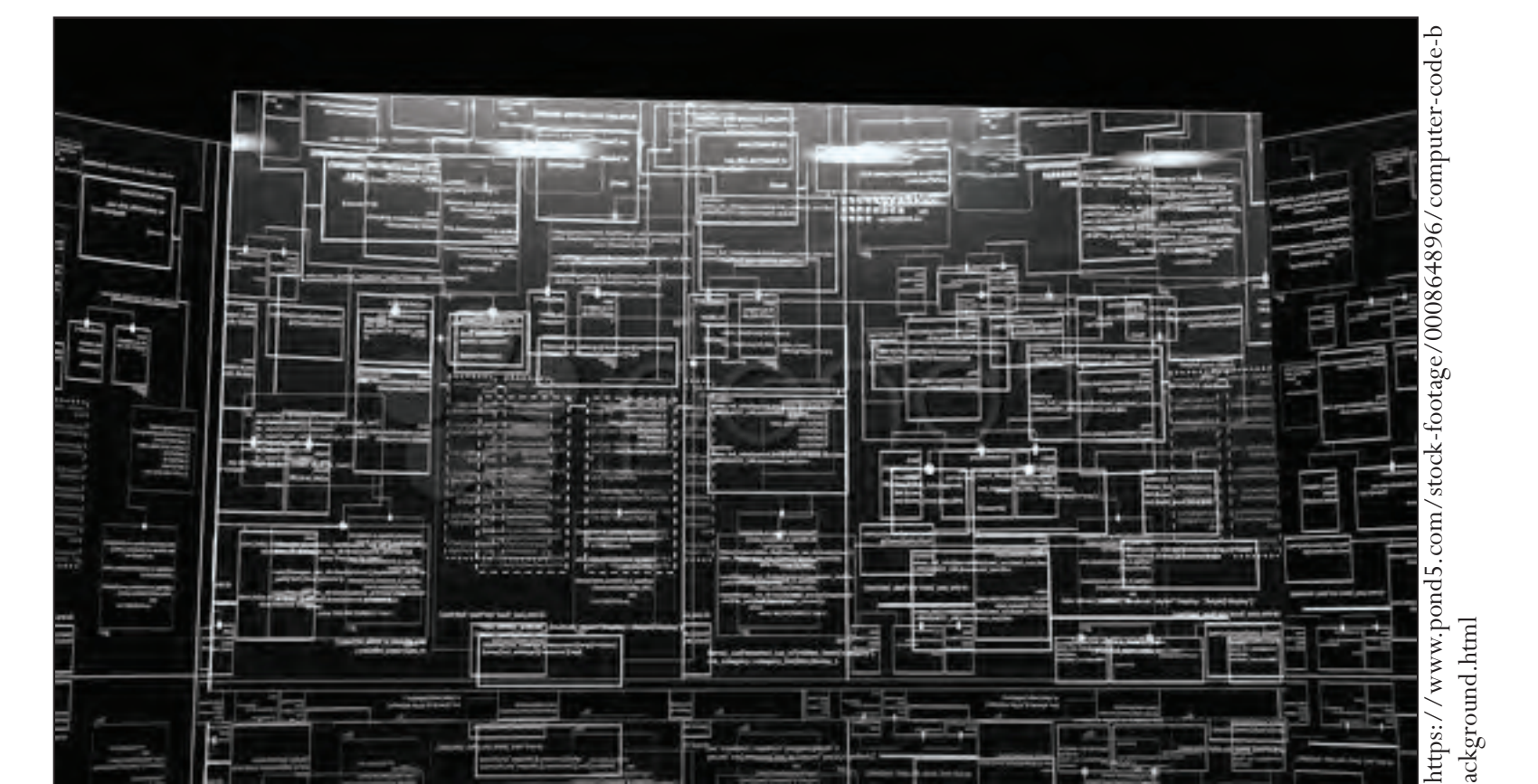
Punch cards created by Babbage to program the Analytical Machine.



Detail of Manual Crank



Full Set



Computer Code Programming Diagram



Detail of Upstage Center Platform



Detail of Full Set



Detail of Downstage Right Platform



Full Set with Black Light





