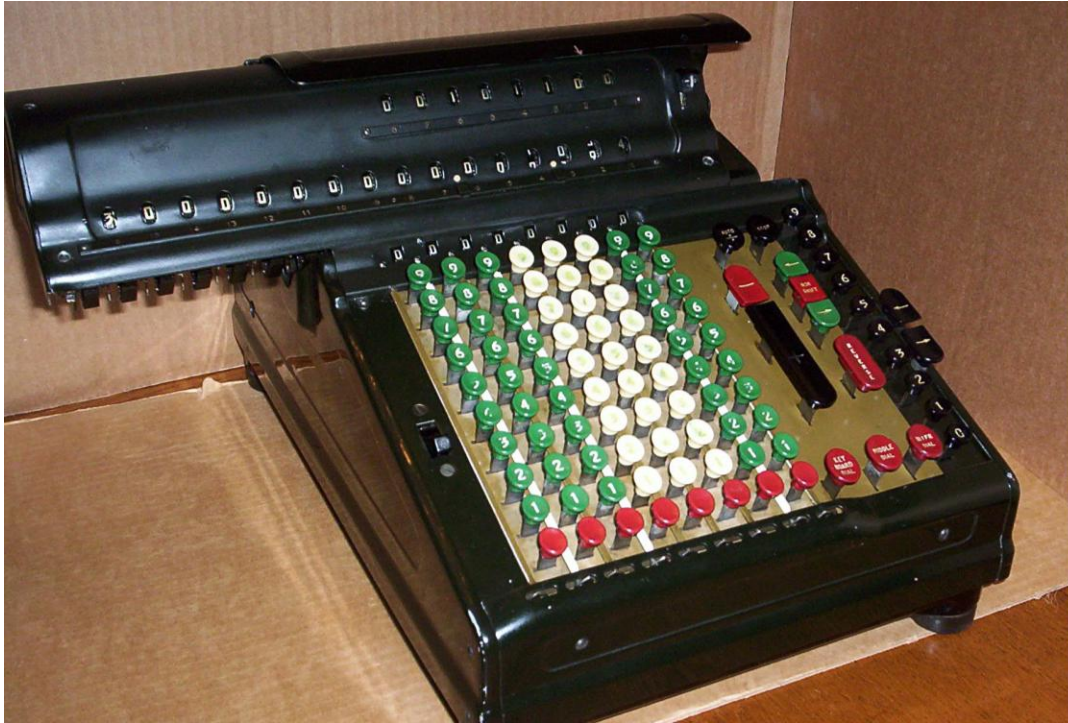
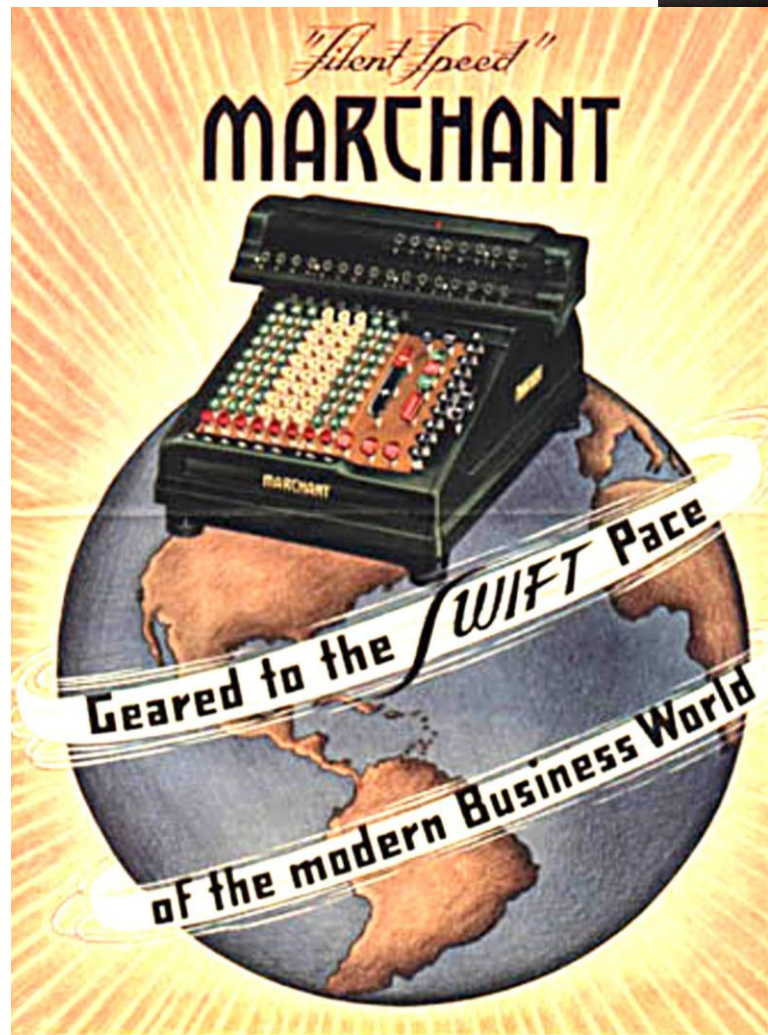


Livermore Heritage Guild's 1937 Marchant Calculator



Rev. A - 11/12/2013
Harry Briley

Docent Operation



2013

Our **1937** Marchant Calculator, serial# **8M-118413**

The "Manhattan" nuclear bomb project used an improved model four years later and that model is displayed in the Bradbury Museum in Los Alamos, NM

Marchant “Silent Speed” Calculator

During 1933–1936, the “Silent Speed” (patented in 1929) introduced a spectacular innovation in mechanism and operation.

- All other manufacturers used the “start and stop” mechanism which starts and stops the dials as many as 20 times during the development of just one figure
- In the “Silent Speed”, a figure was developed with one start, and one stop, by a bank of continuously meshed proportional gears.
- This operation increased the dial counts per minute from 340 in earlier machines ... to 1300 with the “Silent Speed”
- These revolutionary proportional gears – one of the great steps forward in calculators – was conceived and applied by Harold T. Avery, chief engineer, who had joined Marchant in 1929
- <http://www.mortati.com/glusker/marchant/since1910/p4.htm>



- This variant from the same era has a real multiply key
- Marchant Calculating Machine Company, of Oakland, put in a lot of development into later models, which culminated in fast versions capable of deriving square roots!
- In 1958, Marchant merged with Smith Corona Typewriter Company to form Smith Corona Marchant (SCM)

Web Museum:

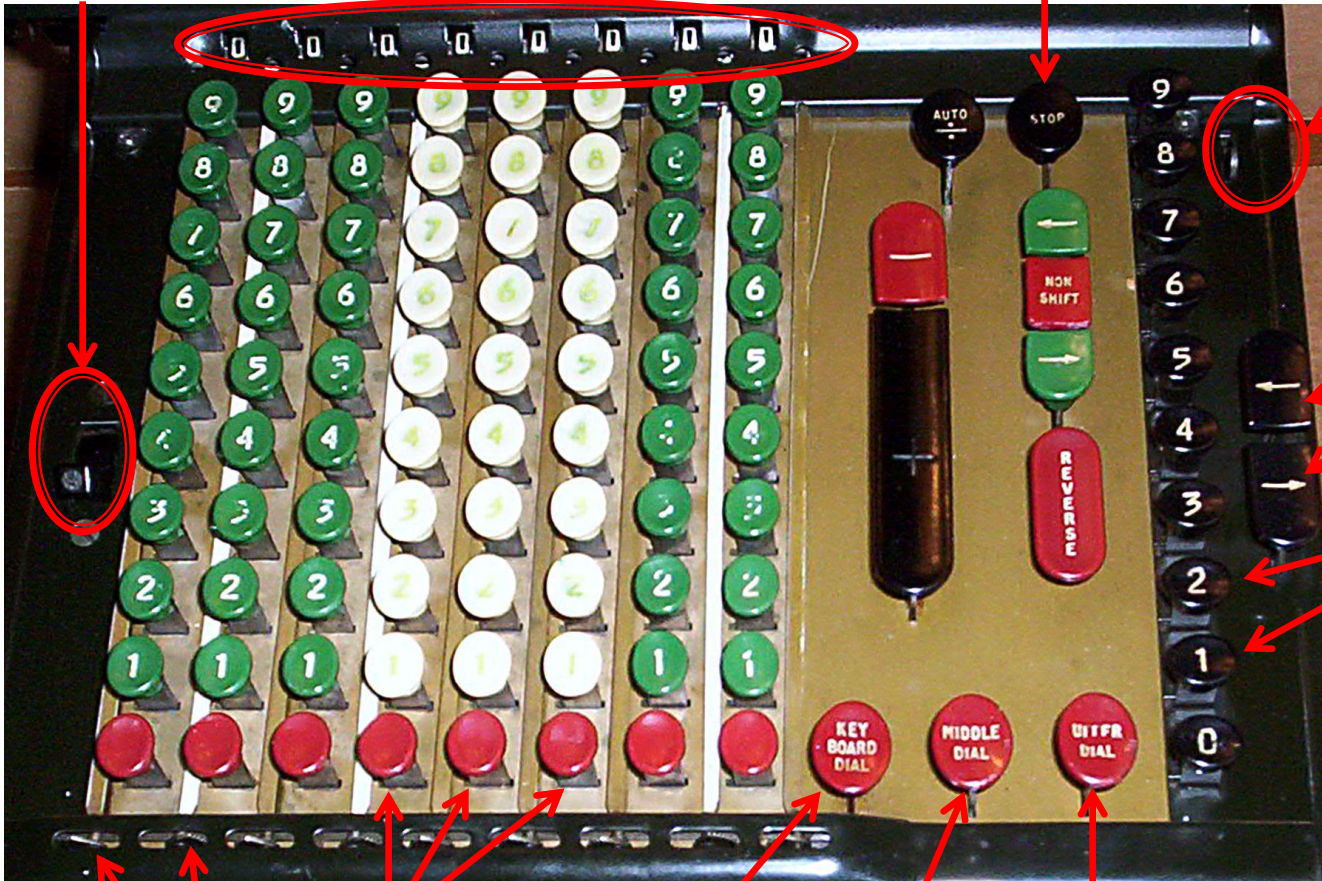
<http://www.vintagecalculators.com/html/marchant.html>

- This is a **non-printing** electric proportional gear calculating machine
 - It uses a standard ½ inch center coffee pot plug.
- Right of the number keys are auto-divide and stop keys, subtraction and addition bars, shift keys for use in multiplication, and a reverse key
- Right of these is a column of ten black keys for automatic multiplication, two carriage shift keys, and a clutch lever to suspend carriage resets.
- The movable carriage has two ranks of spin-dials. Numbers are represented by sets of gears on three shafts beneath the carriage
- Sliding decimal markers on the carriage solely aid the human user
- http://americanhistory.si.edu/collections/search/object/nmah_690721

Power Switch

Keyboard spin-dials

Stop resets any pressed buttons on this right side



Lever prevents reset of the two carriage ranks

Carriage Shift Left or Right

Multiplier Buttons

Clear specific digits, all digits, and bottom/top rank of carriage.

Rotate white marker bars to help human define decimal point precision