

Livermore Heritage Guild's 1920-26 Dalton Adding Machine



Rev. A - 11/13/2013
Harry Briley

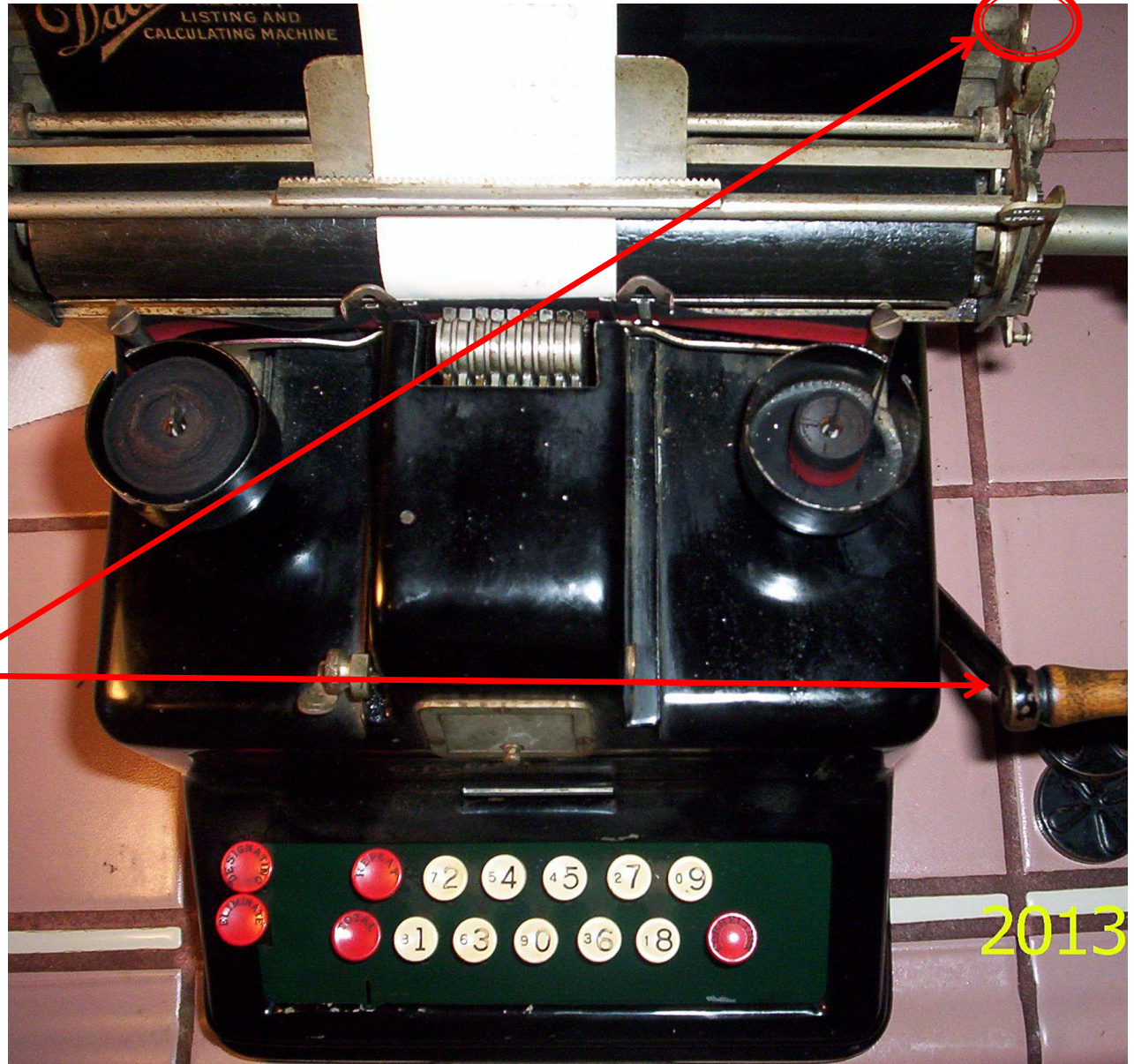
Disassembly for Cleaning

Remove three screws to remove case straight up

- Two in back
- One in front

Do not remove carriage. It is tricky to reinstall.

The carriage moves freely when handles pulled forward.



2013



Simple Tools for Cleaning:

For Refurbishing:

- White Grease (minimal need)
- WD-40 Solvent (interior gears)

For Maintenance:

- 10W-30 Oil (not Pennzoil)
- FLAT Screwdrivers, one with a screw-holder feature
- Large Magnet to hold screws
- Cardboard mat to catch oil

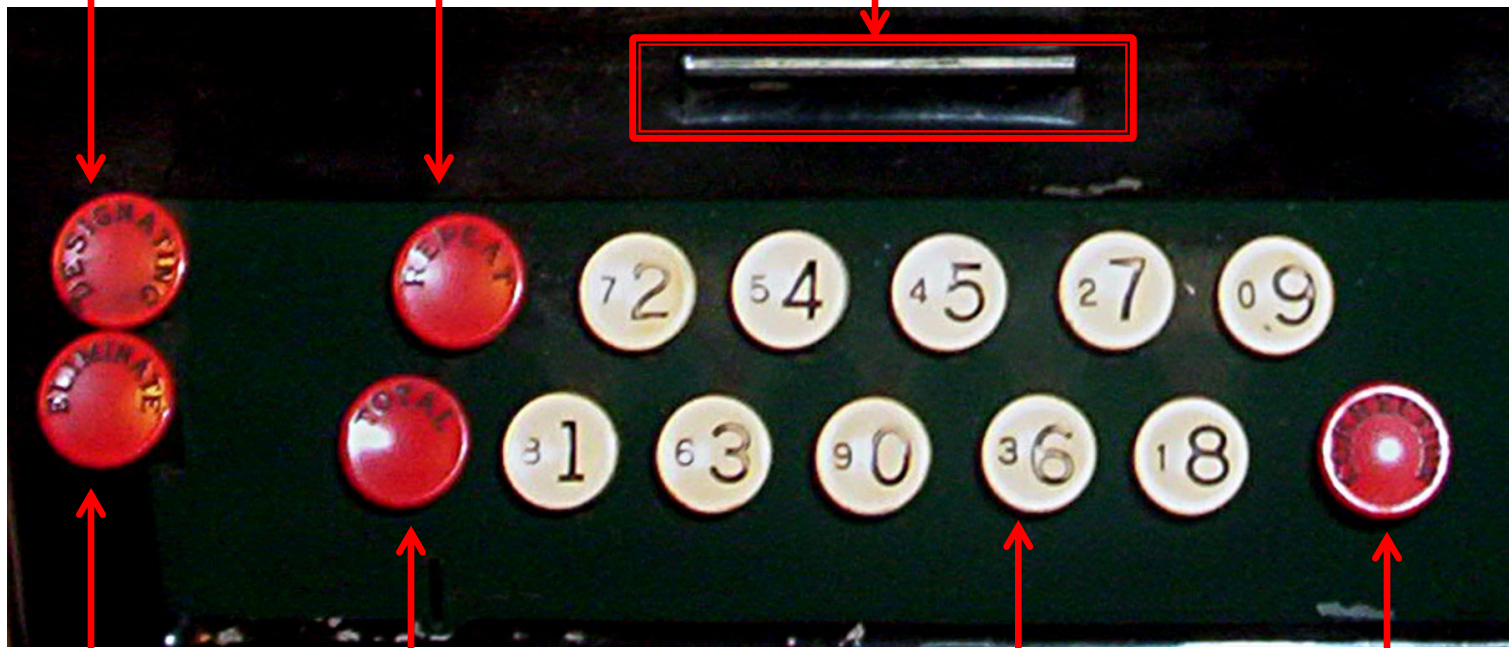
Reattached Handle Spring

- Paperclip crimped in half to replace aged cotter pin

Prints an 'E'
on paper

Before pulling
handle, hold
down to repeat
current number

Digit tally window is merely
a painted stick with dots
that slides back and forth!



Ignore - Subtraction
is complicated to do

Pull lever to clear,
Press Total,
Pull lever to total,
Pull lever to clear

Use BIG digits for
typing in a number.
Lightly touch, digit
occurs upon release

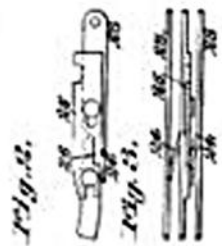
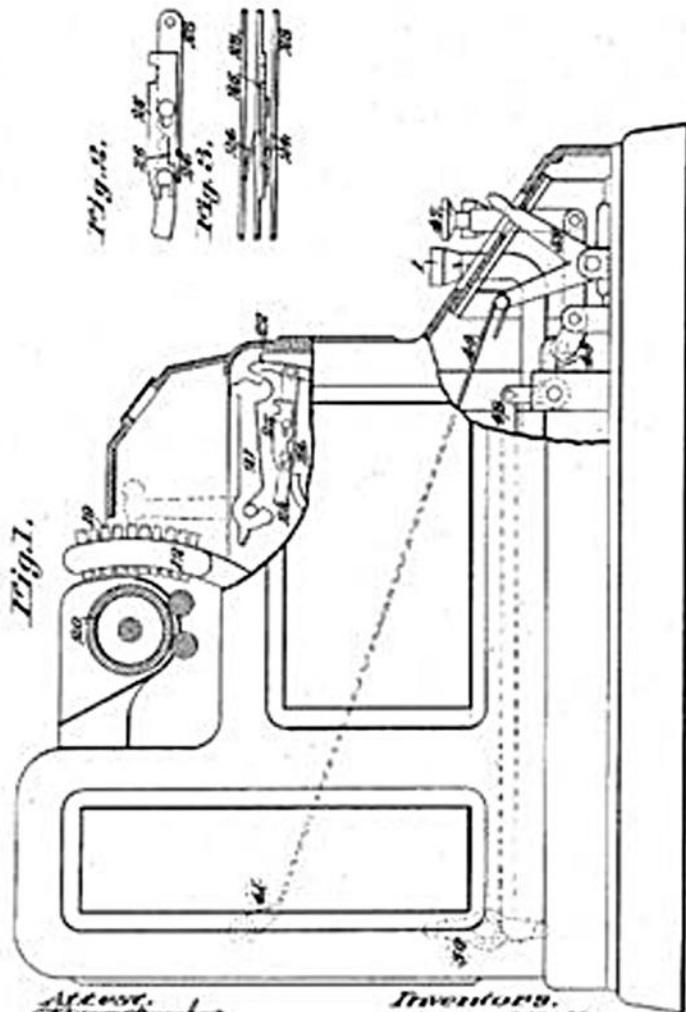
Press correct ALL the
way down the clear an
unwanted number

J. L. DALTON & J. MAGNUS.
 ADDING AND RECORDING MACHINE.
 APPLICATION FILED JUNE 21, 1912.

1,049,057.

Patented Dec. 31, 1912.

8 SHEETS-SHEET 1.



Attest:
[Signature]
 L. G. Berglund

Inventors:
 James L. Dalton
 John Magnus
 By *[Signature]*

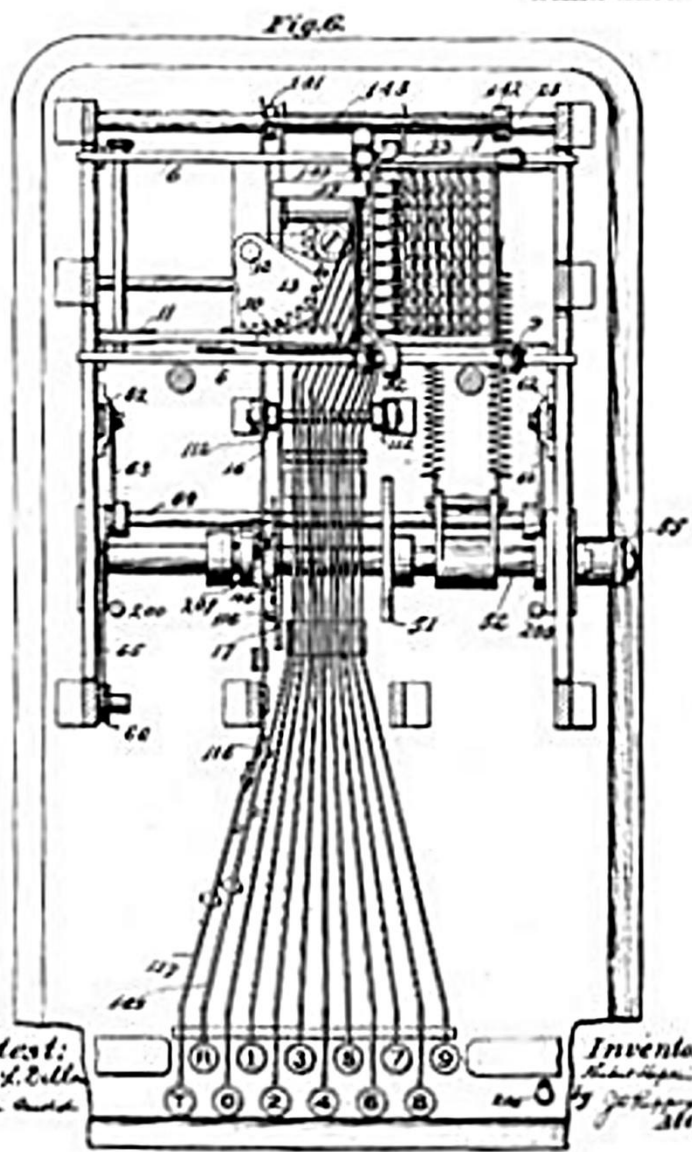
1004

H. HOPKINS.
 ADDING AND WRITING MACHINE.
 APPLICATION FILED JAN. 24, 1912.

1,039,130.

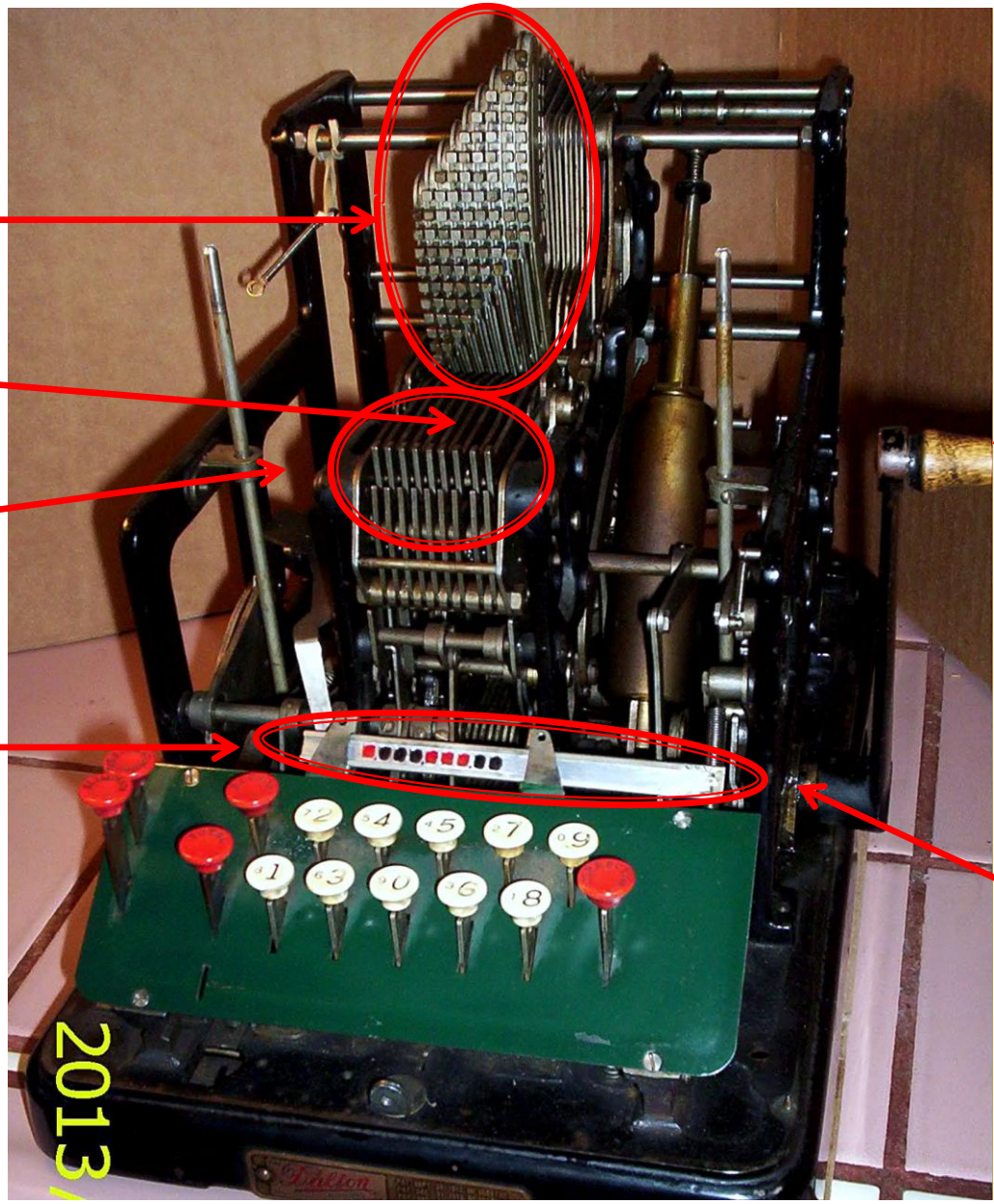
Patented Sept. 24, 1912.

14 SHEETS-SHEET 2.



Attest:
 Edw. L. Diller
 Notary Public

Inventor
 H. Hopkins
 By *[Signature]*
 316



Digit Casing Sliders

Spray WD-40 into interior here

Hammers

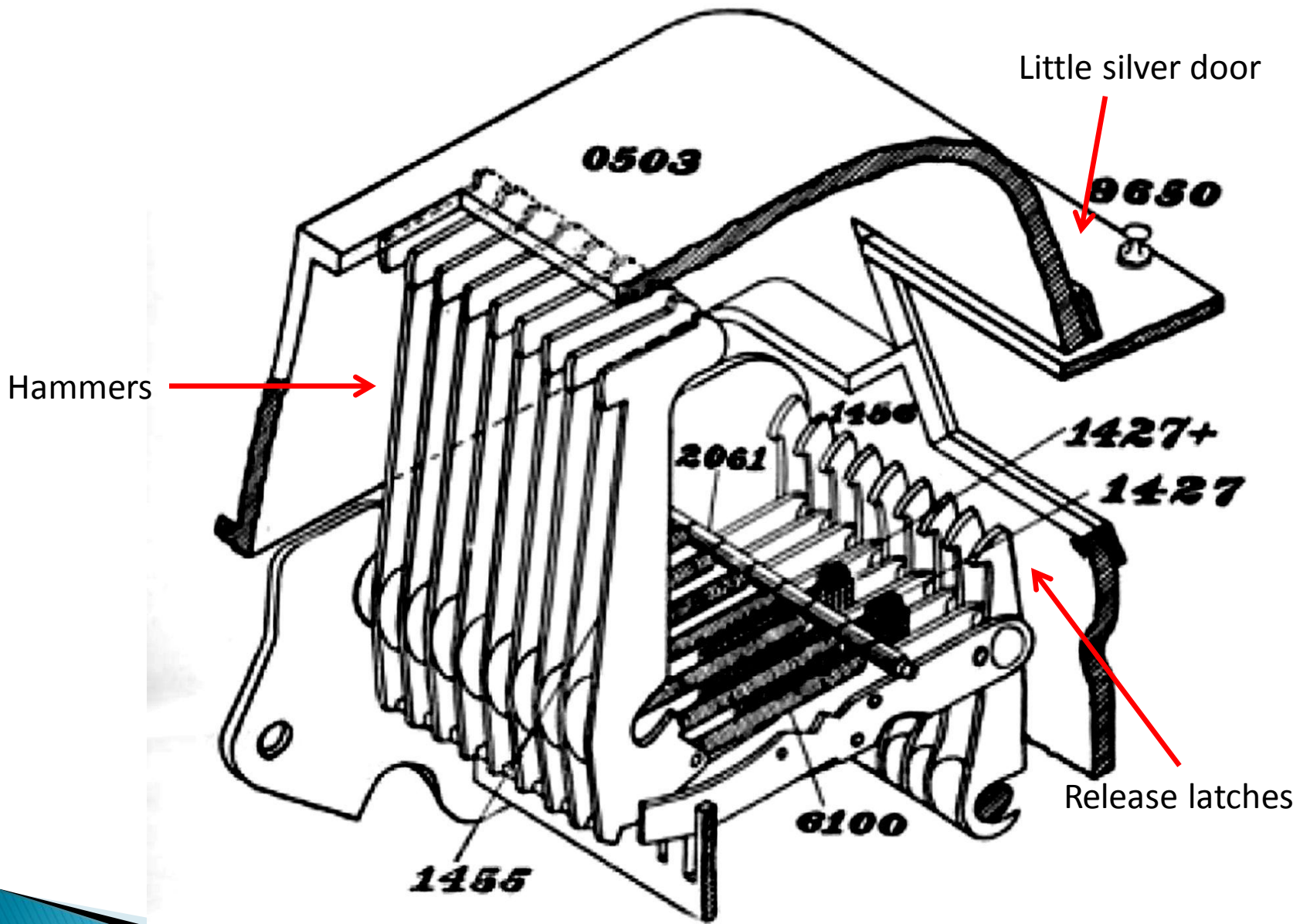
Sliding painted stick that counts digits

- Lightly apply silver fine-tip paint pen
- Red/Black markers for dots as seen

Rub Olive Oil into wood handle, buff off excess

Oil holes on both ends of handle shaft

2013

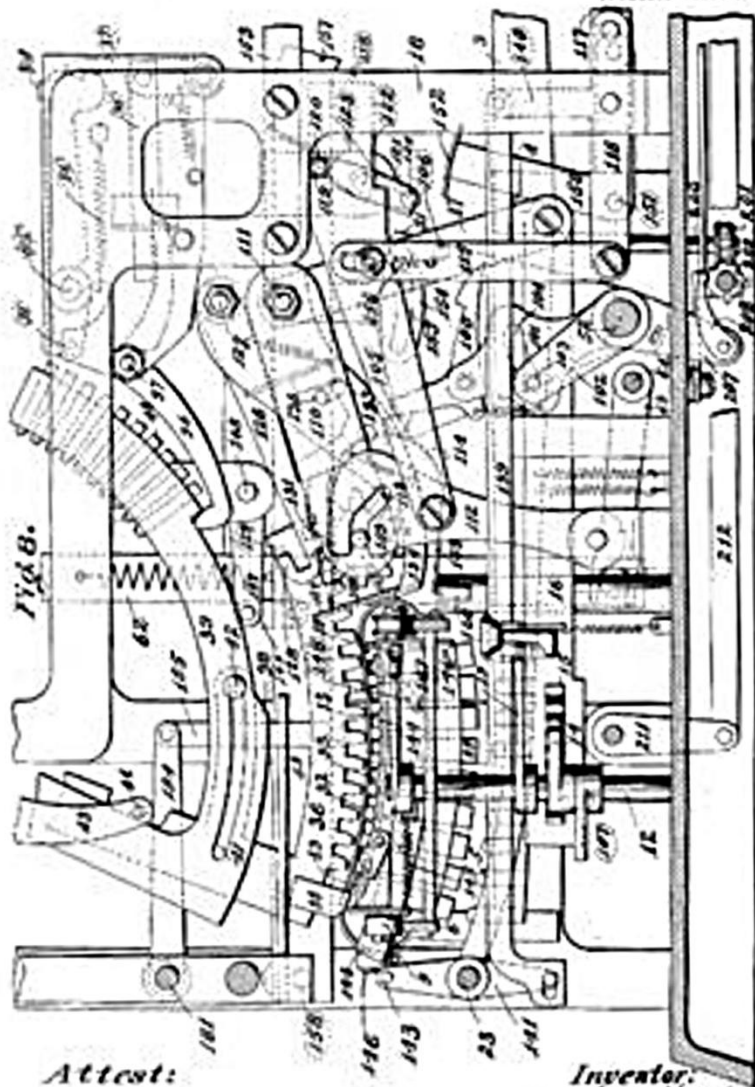


H. HOPKINS,
ADDING AND WRITING MACHINE.
APPLICATION FILED JAN. 24, 1914.

1,039,130.

Patented Sept. 24, 1912

14 SHEETS-SHEET 4.



Attest:
Edw. F. Zilliox
Notary Public

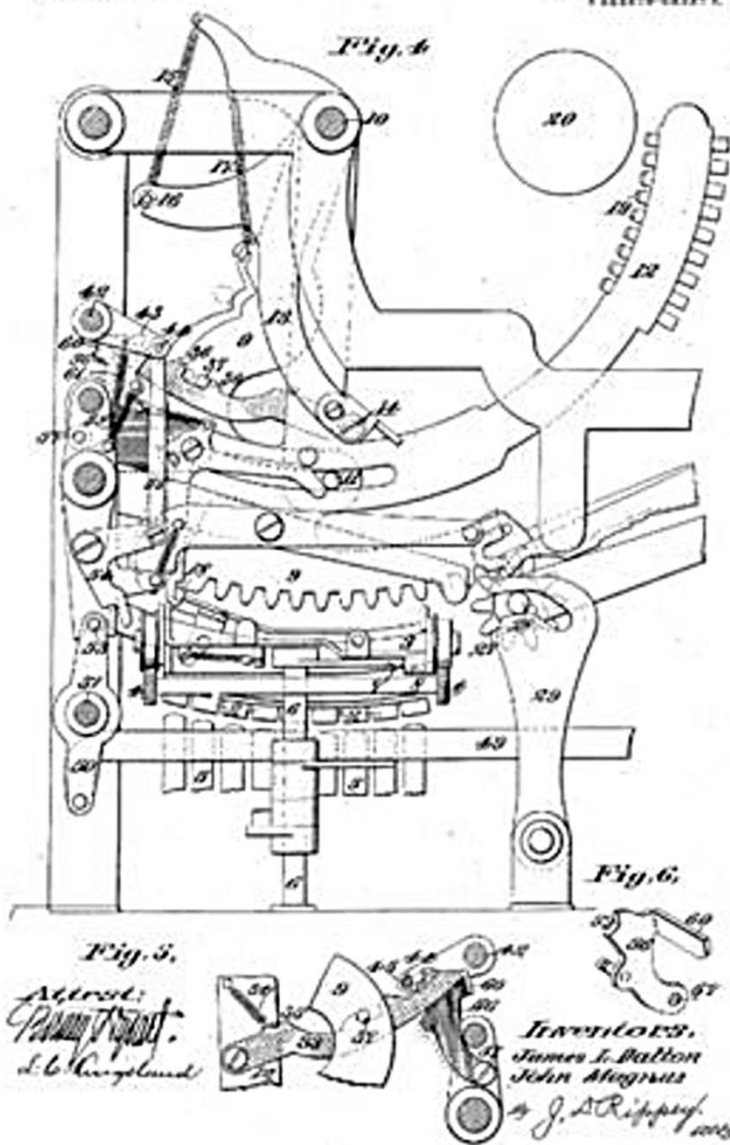
Inventor:
Hubert Hopkins
by J. R. Pappert

J. L. DALTON & J. MAGNUS,
ADDING AND RECORDING MACHINE.
APPLICATION FILED JUNE 27, 1909.

1,049,057.

Patented Dec. 31, 1912

8 SHEETS-SHEET 1.



Attest:
J. B. Campbell
Notary Public

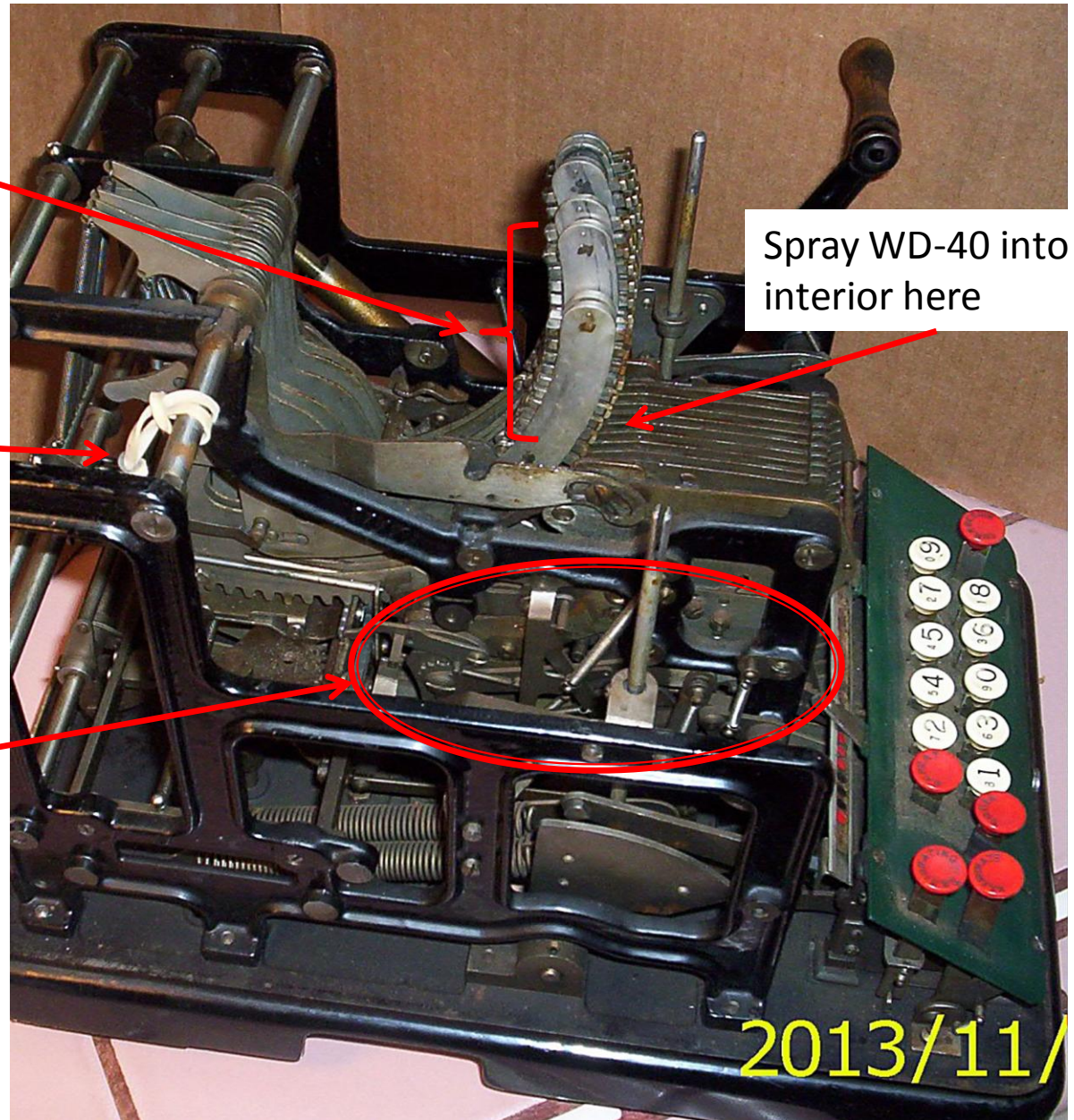
Inventors:
James L. Dalton
John Magnus
by J. R. Pappert

Digit Casing Sliders
Oil each digit until
springs back easily

Spray WD-40 into
interior here

Spare spring
hanging by a
rubber band

Lightly oil all
pivot points



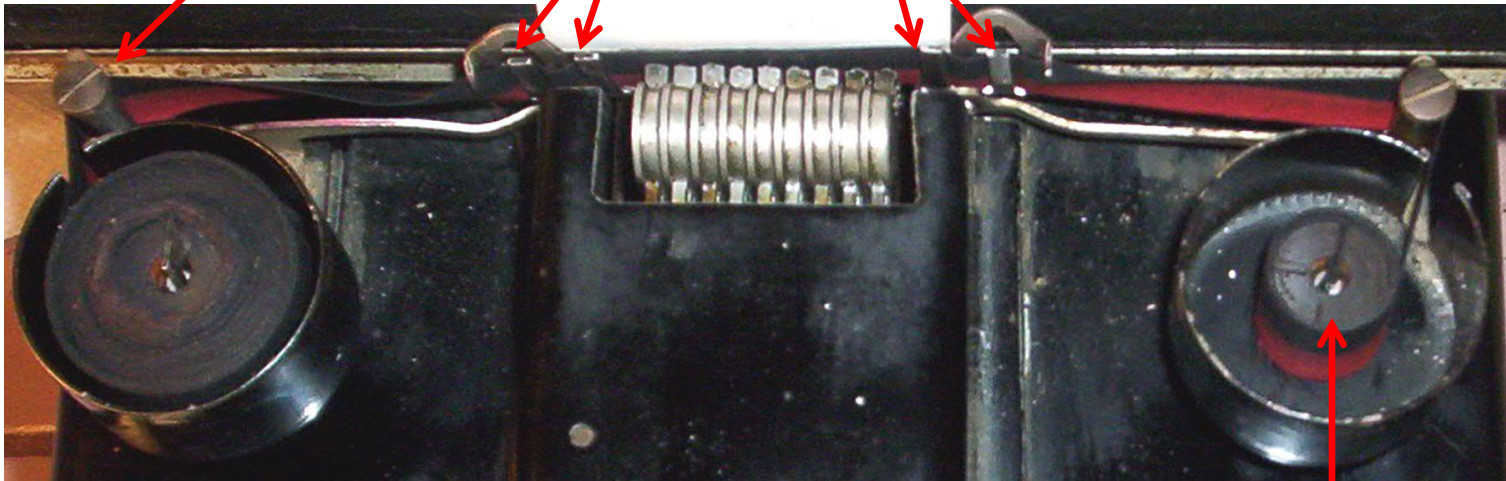
2013/11/



Handle spring is very awkward to reattach. Remove cotter pin to do it.

Ribbon goes
between roller
and tine

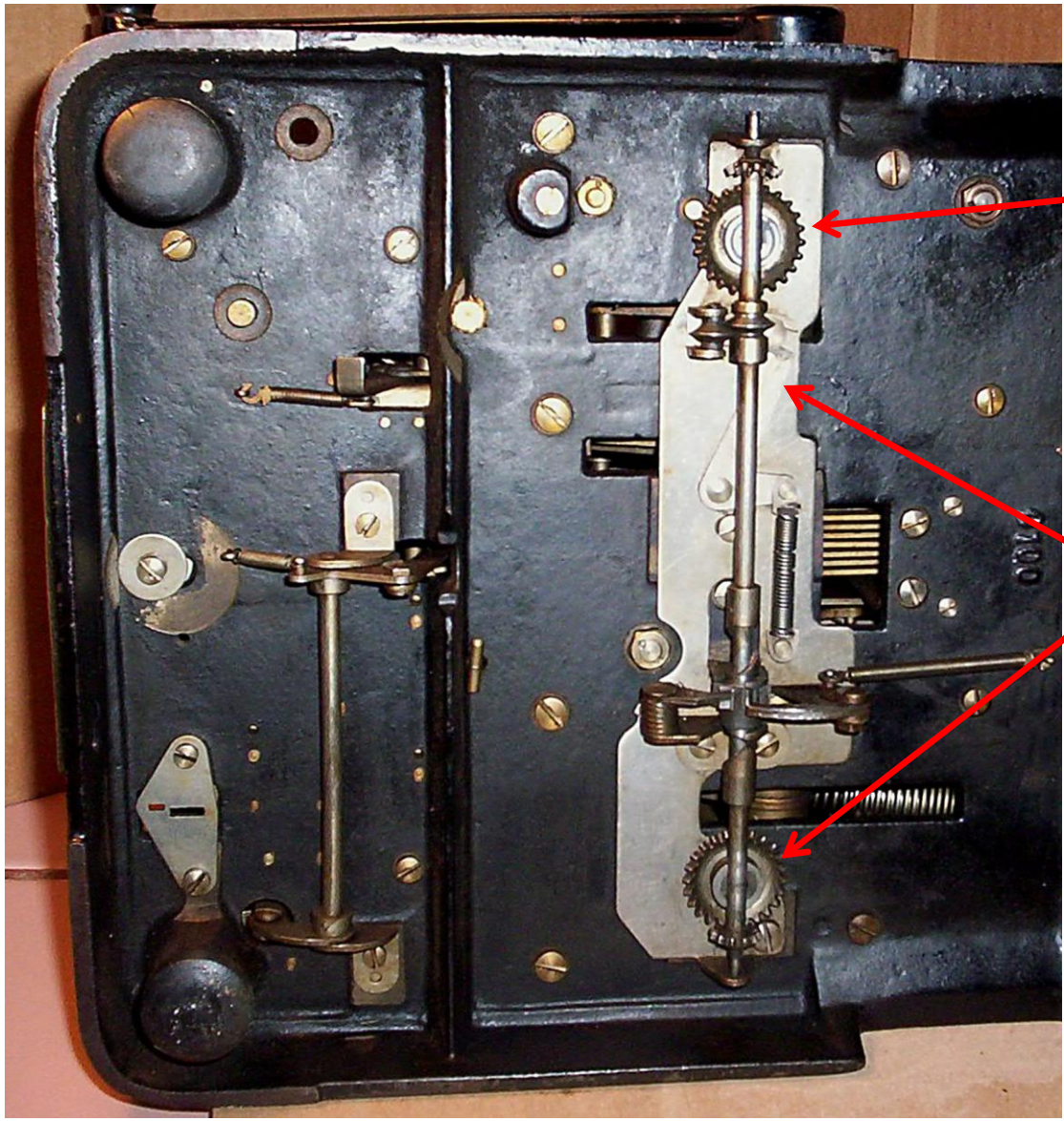
Ribbon goes
behind twin tines



Press Total Button and pull the handle slightly forward until the ribbon tines rise up. This makes it easier to thread the ribbon.

Metal clip on end of ribbon slides fully into wooden spool and into slot of turning shaft.

When ribbon does not auto-reverse, turn machine on side, push away latch, and slide shaft to engage gears on opposite end (See next slide)



Ribbon rotation Gear

- If ribbon does not auto-reverse:
- push away latch
 - slide shaft to engage gears on opposite end
 - return latch to locked position

Dalton Calculator – Repair History

- 11/12/2013 Harry Briley Unfroze with WD-40, Oiled, Made fresh cotter pin to attach return-spring to Handle
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