## PLATO CLOCKS

# The Great American Novelty Clock Invention

Presented by

Darrah Artzner

## Time Line of Inventor

- Eugene L. Fitch native New Yorker 1846
- Residence in Minnesota 1869 Iowa in 1870
- Dry goods merchant 1880 (Breda, Iowa)
- Bookkeeper (Des Moines, Iowa) 1882 -1885
- Began collecting patents (type writing machine, 1880; thread case, 1882; Siphon-Starter 1883; typewriter shift key, 1886; U/L case type spacing 1887; typewriter cabinet, 1888

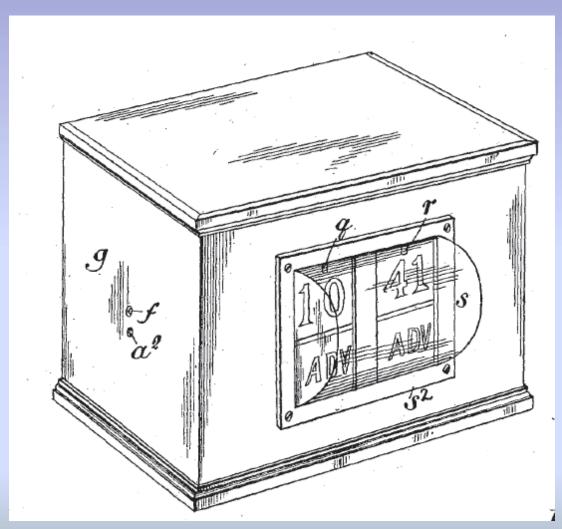
## Clock Patent Chronology

- Introduced clock to attorney (Henry D. Williams) 1900
- Time Indicator, application in 1901
- Time Indicator Patent in December 1902
- Problem solving (leaf material, position, flipping)
- Final Clock Patent 1903
- Improvements

## Time Indicator's Purpose

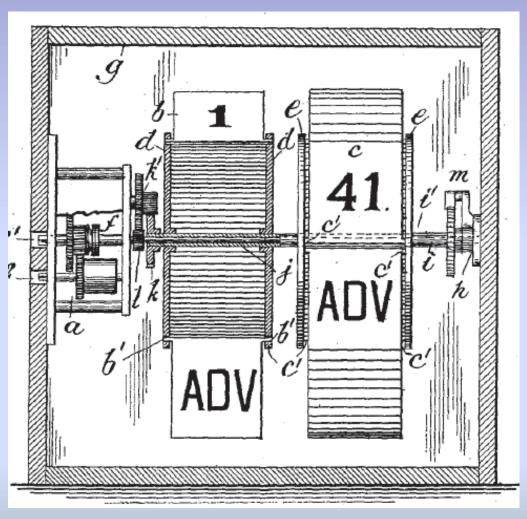
- Attract Advertising (one side of leaves)
- Instant Time Telling (digital)

# Original Configuration



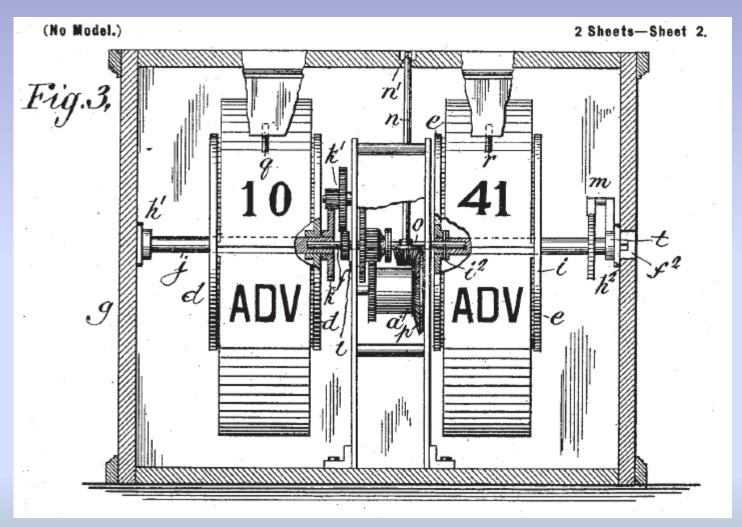
From 1901 Patent – external view

# Original Configuration



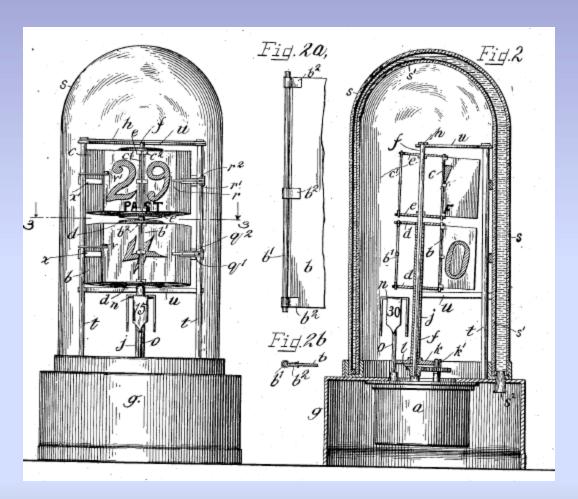
1901 Patent – internal layout showing movement on left

## Original Configuration



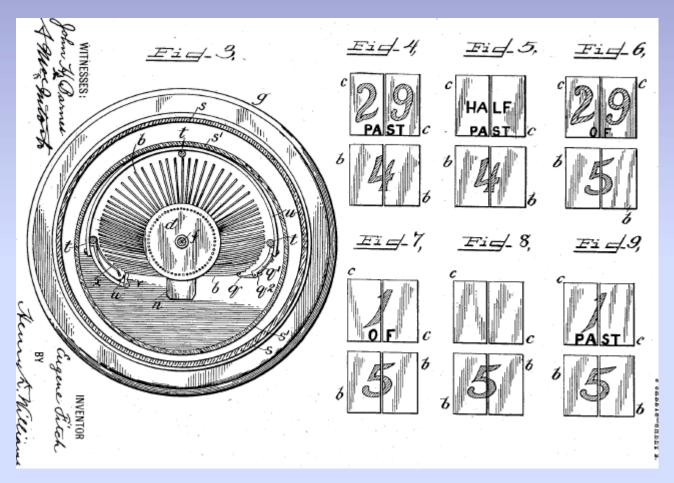
1901 Patent – internal view showing movement between leaf assemblies

## Additional Configuration

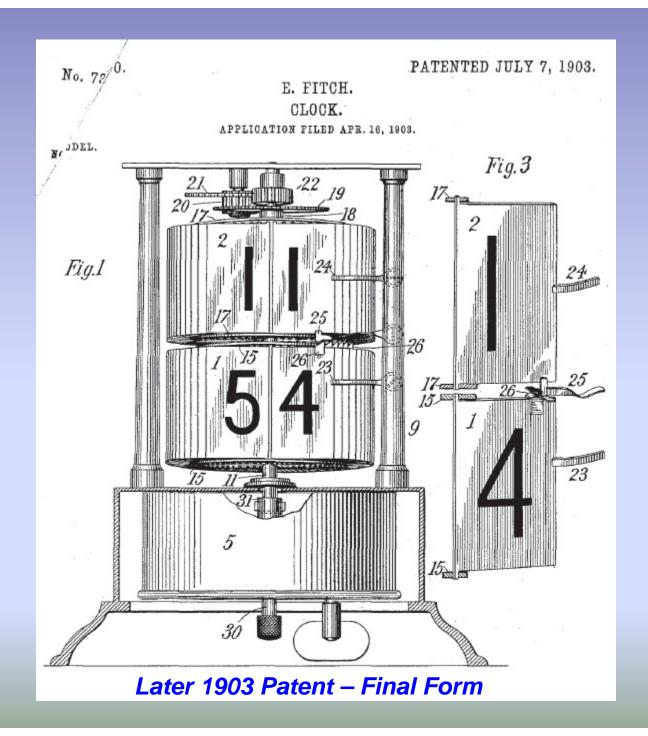


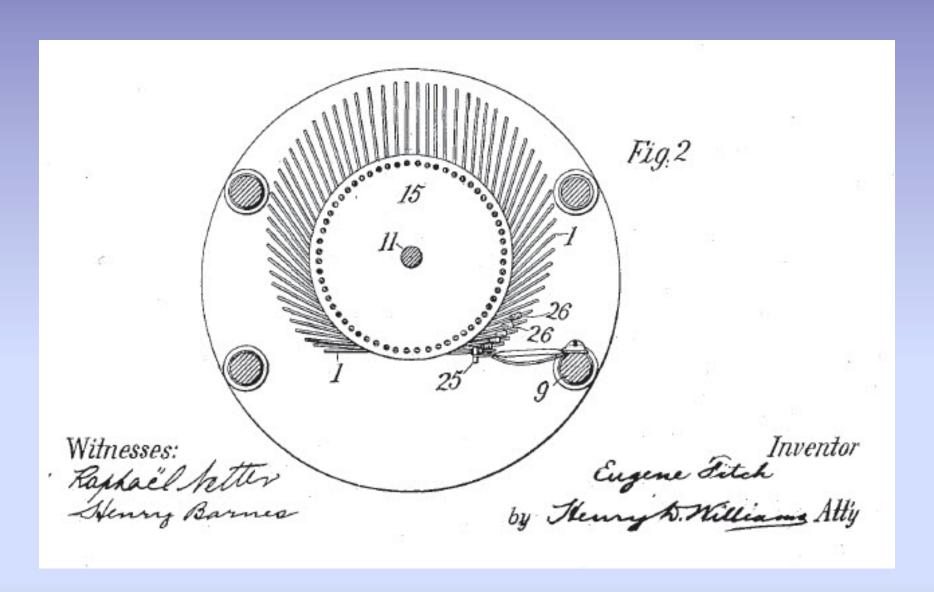
Early 1903 Patent - side view

## Additional Configuration



Early 1903 Patent – top view with examples of lettering





Later 1903 Patent - Final Form Top view

## Patent to Production

- Conrad Herbert, American Ever Ready Co. 1903 financed
- Available for sale in 1904
- 40,000 sold
- Clock NO, novelty YES

## Clock Description

- Brass (rectangular) or gilded molded metal (round) body with glass (sides)
- Height ~2x > width
- Vertical positioned sets of leaves on extended drive shafts
- Time train separate from movement
- Ansonia clock movement (square and screw keys)

## Original Details

- Leaves: metal > celluloid (colors)
- Both sides of leaves (tabs, cards) are used for display
- Hour and minutes positions could originally be interchanged
- Controller tab on 54-59 min retaining springs
- Early novelty features: seconds disk; water filled; Ads

- 1 Round
- 2 Rectangular
- 3 Round with cap (mushroom)
- 4 Round with figure

### 1. Round



### 2. Rectangular



### 3. Round with cap (mushroom)







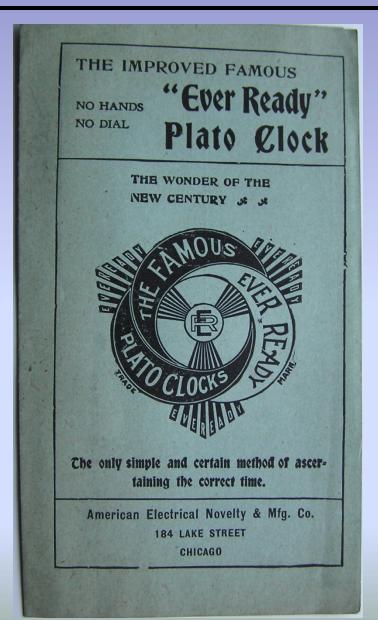
### 4. Round with figurine







## **Advertising Brochure**



#### The Evolution of

#### Computing Time

FROM
THE SUN DIAL,
HOUR GLASS AND
PRESENT DAY ...
DIAL CLOCK—TO

#### The Famous

"Ever Ready"

#### Plato Clock

#### No Hands-No Dial

The "Plato" tells the time at a glance, and as the hours and minutes are shown in figures, no mistake is possible. It is the most novel and interesting article that has yet been invented. A perfectly accurate time keeper, and will last indefinitely.

### For a Holiday, Wedding or Birthday Gift

it is unexcelled, and a lasting remembrance.

## Advertising Brochure

### THE FAMOUS "EVER READY" PLATO CLOCK



Design No. 1 86.00

These clocks will keep as perfect time as the present dial clocks.

32 3

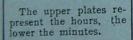
Only the highest class of material and workmanship are employed in their manufacture.

3 3

Wound, set and adjusted like any ordinary clock.

× 3

NO HANDS



ل عو

They are of the finest finish and most beautiful colors.

× ×

Plates can be furnished in the following colors: Red, White, Blue.

3 3

In ordering be sure to specify just what colors are desired.



Design No. 2 \$6.50

#### THE FAMOUS "EVER READY" PLHTO CLOCK



Design no. 3 \$7.00

These clocks are wound, set, and regulated the same as any twenty-four hour watch or clock.

× ×

Will last indefinitely. Protected by neat glass globe.

x x

The artistic and ornamental frames are of the latest design, pattern and finish.

An appropriate Holiday, Birthday or Wedding Gift.

JE JE

Not only useful and novel, but ornamental as well.

Je J

For the Parlor, Library, Sitting Room, Den, Ladies' Boudoir and Office Desk.

se se



# Physical Features (Inscription)



**Movement cover** 



The Plato Clock

**PATENTED** 

DEC 16,1902-Apr 28,1903

Apr 7,1903-July 7,1903



(reversed image)

# Features (Inscription)

Patent information stamped around base of case





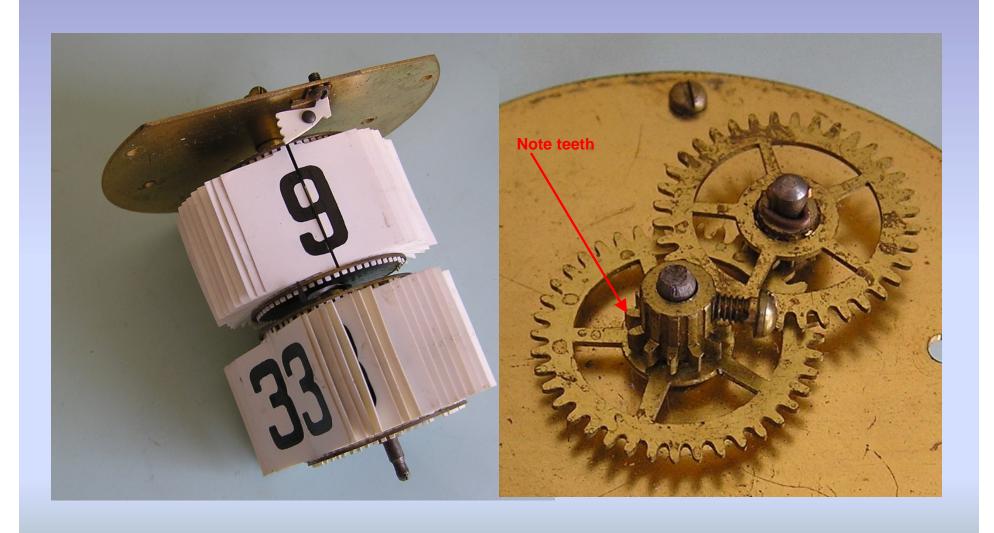
# Features (Leaves)



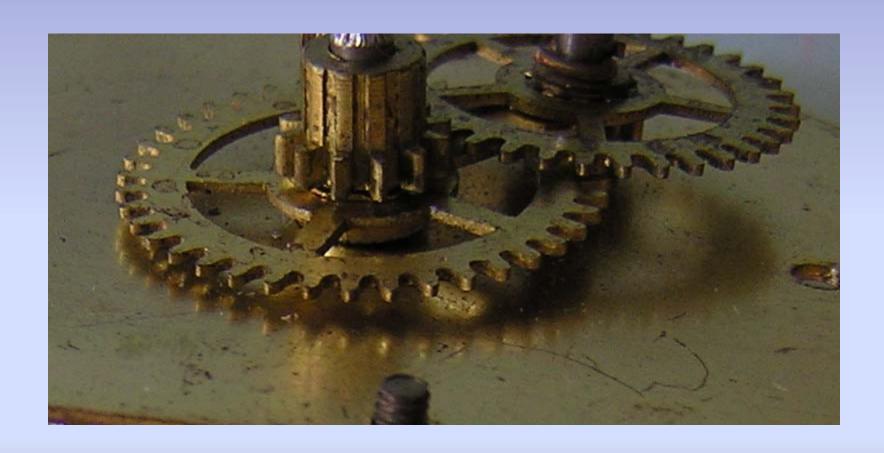




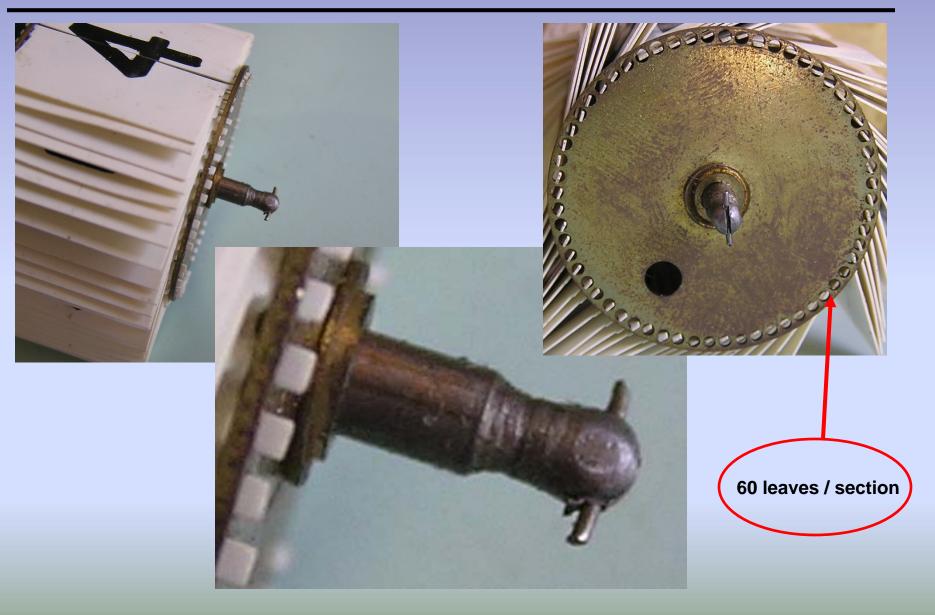
# Features (Leaves assembly)



(Leaves assembly gearing)



(Leaves assembly connector)



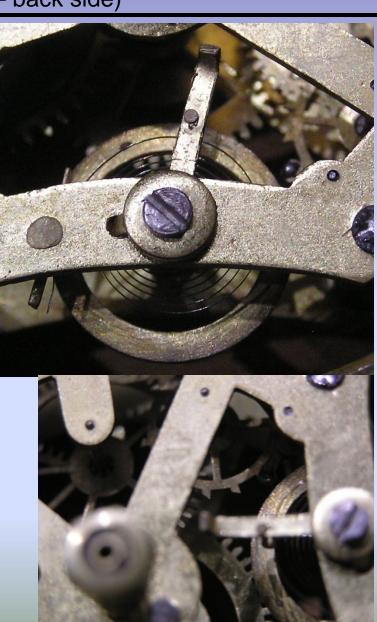
(Base – top and bottom)



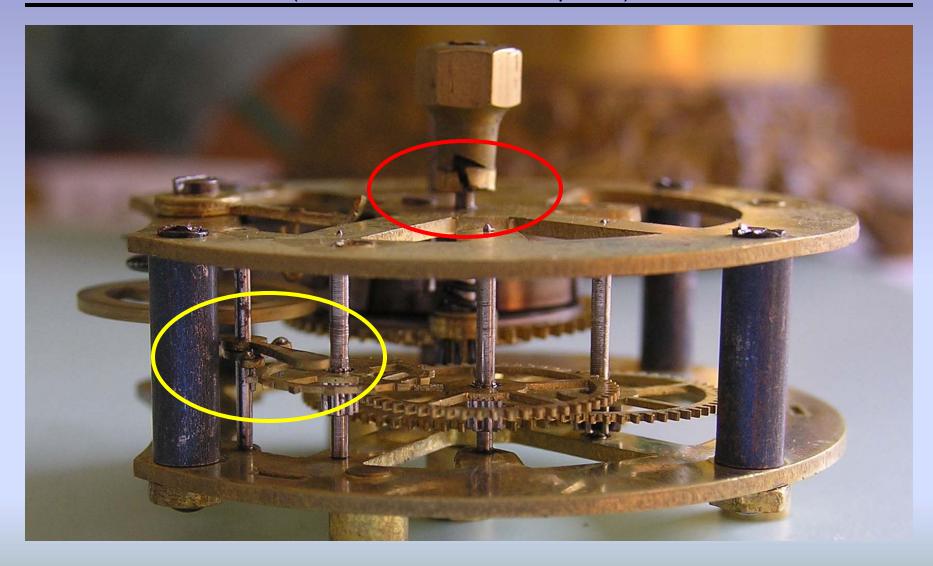


(Movement – back side)





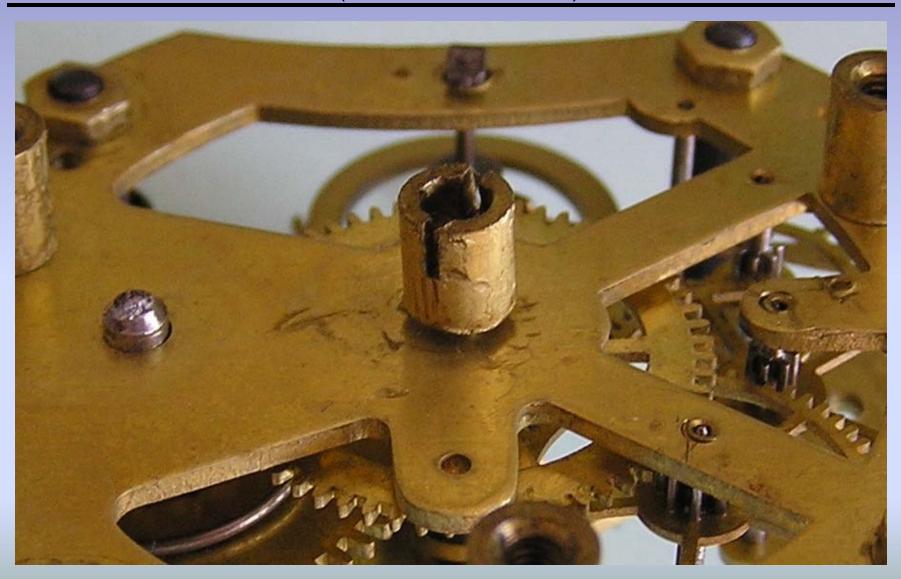
(Movement – back side upward)



(Movement – dial side)

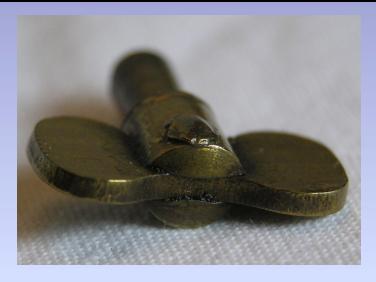


(Movement – dial side)



# Features (Keys)









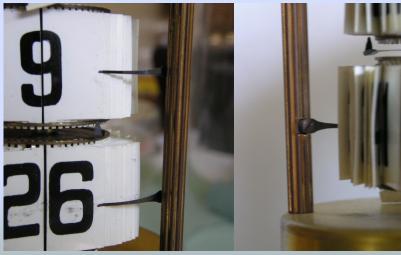
# Features (Additional Components)



Retaining levers and spring stops







## Why 'Plato'?

• Fitche's patent attorney, Henry Williams, suggested Plate—o because of the plates. (Terwilliger Jr.)

Nothing to do with Greek Philosopher

### Who Owned What?

- Did Fitch own the Plato Clock Co.?
- Or did the American Ever Ready Co.?
- Why Ansonia?

## Why the Confusion

- Movement cover may or may not have imprint (The Plato Clock Co.)
- Movement may or may not have imprint (Ansonia)
- Different style winding arbor
  - square and key clip
  - square with no key clip
  - Threaded arbor with tab key

### Non Patented Production

- US only Patent (1904 to 1906)
- Licensed to French Co. (30 hr and 8 day Fitch Clock)
- One French and 3 German non licensed pre WW1.
- Josef Mergenhagen (Uhrenfabrik Laufamholz Kohler Co.) 8 day 7 j (Kohler or Abessi)

### References

- American Electrical Novelty & Mfg. Co., 1904?, Advertising brochure.
- Coleman, J. E. and Niehaus, James J., 1948, The Plato Gadget Clock With Turning Leaves, NAWCC Bull., December, pp. 516 – 519.
- Terwilliger, Jr., Charles O., 1964, Plato Clock, NAWCC Bull., October, pp. 447 460.









QUESTIONS?