1st Quarter 2001 Volume 2, Issue 1

# Alarm Clock Newsletter

# Special Pull-Out

• Included in this issue is a 3 page copy of the

Section

- March 27 1877 Patent by Henry J Davies & Walter D. Davies for the first Tin Can Type Alarm Clock made by the Ansonia Clock Co.
- Provided by Pat Dowd of Peoria Illinois

### Special points of interest:

- Special Insert of the 1877
   Patent for the Ansonia
   Alarm Clock.
- Report on LA Regional Meeting.
- Regionals & Mini-mart and a great find of a Mystery Clock at a local mini-mart
- Updates on the Boos Clock Co. and the One Spring Clock Co. in the Next Issue.

### Greater LA Regional Meeting

The Alarm Clock Chapter met at the Greater Los Angeles Regional on Friday February 2 2001. President, Howard Banta, open the meeting by thanking all the members for supporting the chapter and attending the meetings. He went on to report the chapter was doing well and growing with over 50 members so far. Also, that the book project was still in the works. Kim St. Dennis, explained the focus of the book project and funding issues that had come up. One of the issues raised was the focus of the Book. One proposal is to write a short history of the alarm clock and include large photos of the more interesting alarm clocks. Because most good histories start at the beginning, we started researching the first alarm clock (See this Months insert — Ansonia's March 27, 1877 patent filing documents, submitted by Pat Dowd). Kim also updated the research on the Boos Clock Co., and will be updated in the next newsletter. Chapter 75 has expressed an interest in helping to fund the book project, but wants a grant proposal submitted before funds can be released. We are

## Mystery Clock

The scuttlebutt going around these days is that the Marts and Mini marts the chapters put on are in a decline. Some site E-bay as the culprit, others say that there are just too many regionals and mini marts. Like most, I

(Continued on page 2)

currently investigating research and publishing costs. Vince Angle brought a large collection of alarm clocks and their original boxes for the display at the meeting. He has some very interesting ones including an Ansonia "Bee" and it's wooden box. It was noted that most Bees came in tin cans and that the Vince's "Bee" dial had Arabic numerals rather then the usual Roman numerals. During the general discussion at the end of the meeting, John Hubby brought up the German trade magazine "Deutsche Uhrmacker-Zeitung" microfilm project. He ask that all members send donations to the NAWCC Library for the purchase of microfilm from the Library of Congress. (See Deutsche Uhrmacker-Zeitung Magazine Fund proposal in Vol. #2 — No. 2)



### Mystery Clock (continues)





had begun to worry whether or not the pundits of doom & gloom were right. Then just when you start to think these pundits may be right, you find something to restore your faith. Last year I went to several Mini-Marts, Regionals and the National in Philadelphia. All the really interesting alarm clocks I bought recently came from NAWCC events.

During a recent Mini Mart I found this mystery alarm clock hiding in a box under a table. One look at this

alarm clock and I knew it was something special.

First of all, it looked like an old Victorian design and seems to be from the 3<sup>rd</sup> or 4<sup>th</sup> quarter of the 19<sup>th</sup> century. It had a cast iron case and an old replacement dial. The case was cast in several parts, not in one piece.

When I held up the clock

and asked how much, the table holder said \$20.00. Needless to say, the alarm clock went home with me.

When I got it home, I took it apart to see if the manufacturer had marked the move-



"The movement was an old style balance wheel alarm clock movement with "pinned" posts holding the plates together"

ment. No luck there, but the movement was an old style balance wheel alarm clock movement with "pinned" posts holding the plates together (see Photos). I then checked my reference books for a picture of the alarm clock and the name of the manufacturer. After much researching, I found a reference and a catalog line drawing of a very similar alarm clock in Roy Ehrhardt's "Clock Identification & Price Guide" Published in 1977 by Heart of America Press. Roy Ehrhardt's books are very interesting. The Identification & Price Guide's have lots of line drawings from catalogs. Although a bit eclectic, I have been able to find pictures of clocks that exist no where else. The line drawing is from the January

#### Alarm Clock Chapter # 178

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### Alarm Clock Chapter # 178



# Mystery Alarm Clock (Continues)

pany produced clocks under the Terry name for several years after acquiring the Terry Clock Company. According to Roy Ehrhardt's book, the clock company went out of business sometime after 1890. In his dating chart, Roy has "Russell & Jones" taking over the Terry Clock Co. in 1884.

While writing this article I came across another reference on page 66 in the same identification guide. It is an E. N. Welch alarm clock that comes very, very close. The handle and the molding are the same and the general design is very close to mine. Can you help identify this alarm clock? Do any of you have this alarm clock or know who made



Back View — Mystery Clock

it? Does anyone have a Terry
Clock Co. or E.N. Welch Catalog
that might have it in it? Any help
would be greatly appreciated
Also do you have a Mystery Clock
that you want help identifying?
Just take a few photos and write a
brief description of the alarm clock
and email or send it to me and we
will put in the newsletter and on
the website. We are putting up a
new page on our web site for just
that purpose (alarmcloxchapter.
com).

# Mystery Clock (continues)





CLOCKS

RUSSELL & JONES CLOCK COMPANY,

PITTSFIELD. MASS., U. S. A.

BEACON CALENDAR.

ATROL ALARM.

1889 illustrated clock catalog of the Russell & Jones Clock Company (See photo above). "Russell & Jones" were the successor to (purchased?) the Terry Clock Co. sometime between 1885 and the date of the catalog. While the catalog line drawing is similar to my alarm clock, there are several things different. The model I have has a case made of multi

pieces. The one in the catalog seems to be of a single piece construction. It may have been redesigned with fewer parts to lower assembly cost.

Also the handle on top of the line drawing case is a carriage clock type, the

handle on the one I have is cast in one piece and not movable. But it is hard to tell from the catalog line drawing. Could it

be that I have an ear-

lier version?

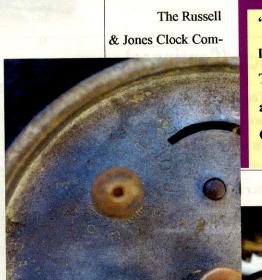
"The Russell & Jones Clock Co.

produced clocks under the

Terry name for several years

after the acquiring Terry Clock

Company."



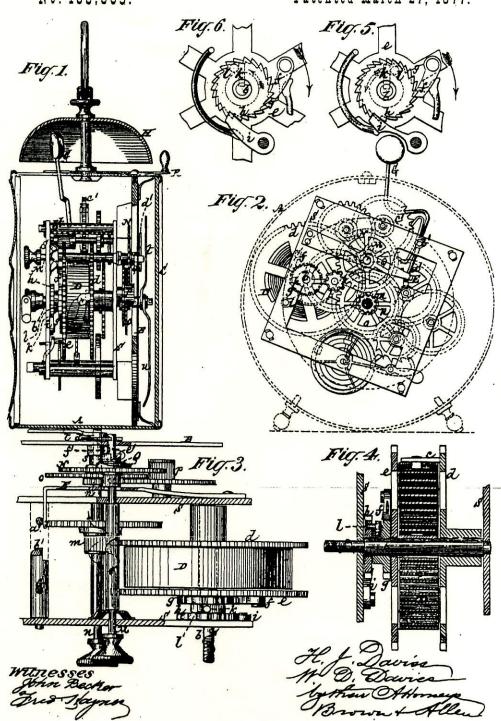


H. J. & W. D. DAVIES.

ALARM CLOCK.

No. 188,865.

Patented March 27, 1877.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, B. G.

# UNITED STATES PATENT OFFICE.

HENRY J. DAVIES AND WALTER D. DAVIES, OF NEW YORK, N. Y.

#### IMPROVEMENT IN ALARM-CLOCKS.

Specification forming part of Letters Patent No. 188,865, dated March 27, 1877; application filed February 14, 1877.

To all whom it may concern:

Be it known that we, HENRY J. DAVIES and WALTER D. DAVIES, both of the city, county, and State of New York, have invented certain new and useful Improvements in Alarm-Clocks, of which the following is a description, reference being had to the accompanying drawing, forming part of this specification.

This invention consists in a novel stop-motion for alarm-clocks, applied to the inner end of the mainspring of the clock, whereby, among other advantages, a uniform alarmmotion is obtained without interfering with the time-movement of the clock, and certainty of action is insured.

The invention also consists in various novel combinations of devices connected with the setting and liberating of the alarm, whereby the setting of the alarm-index in unison with the hour-hand of the clock is facilitated, and increased simplicity and efficiency generally is obtained.

In the accompanying drawing, Figure 1 represents a partly-sectional side view of an alarm-clock having our invention applied; and Fig. 2, a sectional view of the same, in part, taken in the rear of the dial, in a plane parallel with the latter, and showing the clock-case in dotted lines. Fig. 3 is a sectional plan, upon an enlarged scale, of the working mechanism in part; and Fig. 4, a section through the mainspring, in a longitudinal direction with its arbor, of the time and alarm winding devices and alarm stop-motion. Figs. 5 and 6 are views showing different positions of the alarm stop-motion.

A is the clock-case, which may be of any suitable material, shape, and construction, but which is here shown with a removable back, to provide for the winding and setting of the clock from the rear, including the setting of the alarm hand or index, and so that there will be no necessity to expose the dial B by opening the glazed front O, which may be kept permanently closed, thus protecting the dial from dust and the clock-hands from being tampered with. If desired, the lid at the back of the case may also be kept permanently closed, and the arbors of the winding and setting devices be projected through it.

D is the mainspring, and b its winding-arbor, to which the inner end of the spring is secured, while its outer end is attached, by a

hook, c, or otherwise, to the main wheel d. This wheel d, which is the primary wheel or driver of the time-movement, is loose upon the arbor b, and upon the reverse side of the mainspring D is the primary wheel or driver e of the alarm-movement. Said wheel e is also loose upon the arbor b, but is connected with the latter by or through a pawl, f, which is pivoted to the wheel e, and a ratchet-wheel, g, fast on the arbor b, so that while the wheel g is free to slip past the pawl f when the arbor b is turned to wind the spring, it holds the inner end of the spring to secure the action of the latter on the time-movement of the clock. Another ratchet-wheel, h, is arranged loose upon the arbor b. This wheel is also so controlled by a pawl, i, pivoted to the clock-frame S, that it is free to slip past the pawl iwhile the arbor b is being turned to wind the spring, but which pawl i serves to hold the wheel h whenever a stud, k, on the fast ratchet-wheel g comes around as the alarm is liberated, and strikes a stud, l, on the ratchetwheel h, thereby restricting the alarm movement and unwinding action of the inner end of the mainspring to the distance the stud k has to travel in coming round from its driving contact with the stud l when winding up the mainspring, as shown in Fig. 5, to its stopping contact with the stud I on the reverse side of the latter, as shown in Fig. 6, after the alarm has been actuated. Thus it will be seen that the alarm-movement, as controlled by the unwinding of the inner end of the mainspring, is not only positive and uniform, but is restricted to less than a single turn of the arbor b and corresponding limited movement of the mainspring. How much less than a whole turn of the arbor b takes place in the working of the alarm will depend upon the thickness of the stops or studs k l, or otherwise upon their construction limiting the travel of the stud k to less than a whole revolution. In some cases the stop or stud I may be divided iuto two, arranged at any suitable distance apart in a circular direction, with the stud k in between them, thus still further reducing the travel of the stud k in the working of the alarm. Such alarm stop-motion cannot fail to act whenever the wheel e, which is in driving connection by the pawl f, is liberated to operate the alarm, and the extent of the alarm movement is always the same, while, as it is the inner end of the mainspring that operates

the alarm, the latter, in even only a partial winding of the clock, will necessarily be always in working condition for use as required, inasmuch as it is the inner end of the spring which is first affected in winding up the clock; nor will the limited movement of the inner end of the spring to work the alarm sensibly, if at all, influence the time-movement as controlled by the outer portion of the spring.

The time-movement of the clock, actuated by the wheel d, is or may be the same as in other clocks, and does not need any very minute description here, m being the minute-pinion; n, the minute-hand spindle, carrying the minute-hand u; and o, the last wheel of the hour-hand train, which derives its motion from a pinion, p, and which is fast on the sleeve s of the

hour-hand t.

The alarm is liberated by the flying outward, when released for the purpose, of a simple spring lever or hook, E, so as to free it from locking engagement with an arm, a', on the pallet-spindle b' of the escapement wheel c' of the alarm, which wheel is connected, by a train of gear, with the wheel c on the winding-arbor. G is the hammer of the alarm, fast on the pallet spindle b'; and H, the gong.

The means for setting the alarm to ring at any particular time, and for controlling the spring lever or hook E, which liberates the alarm, will now be described. M is the setting-spindle, which, while free to be turned by hand from the rear of the clock-case to set the alarm index or hand d' to the hour or time at which it is required to ring the alarm, is otherwise a still one. Said index or hand is thus adjustable over an independent dial or imitation-dial on the face of the main dial. This secondary dial is divided into hours, and, if necessary, fractions of hours, like the main dial. Loose on the alarm-setting spindle M is a wheel, N, which is in unison with the hour-wheel o, and is in continuous operation with the time-movement of the clock. Thus said wheel N may be of the same diameter as the hour-wheel o, and be driven by the same pinion p. Q is the trip or tripping device by which the alarm is liberated. This trip, which consists of a revolving notched cam moving in unison with the hour-hand or its rotating sleeve, is arranged loose upon the settingspindle M, and is here shown as formed by constructing the hub on the front side of the wheel N with a suitably-shaped notch, c', and fitting said wheel so that it is free to slide lengthwise on the spindle M. This forming of the trip on the wheel, which gives it the necessary motion, conduces to the simplicity and efficiency of the alarm. The spring lever E bears on the back of the wheel N, to slide it outward, and so release said lever from its hold of the alarm, whenever the notch e' of the revolving trip Q comes round, to admit of its embracing or receiving within it a stud, f', on the setting-spindle M. After the alarm has been sounded, the continued rotation of the wheel N and trip Q carries the notch e'

clear of the stud f', and causes the plain portion of the face of the trip Q to bear against said stud, and to slide the wheel N back again, and act upon the spring-lever E, to make it engage with the arm or leg  $\alpha'$  and

lock the alarm.

This combination of alarm setting and tripping devices is not only a very simple one, but it provides for the setting of the alarm index or hand d' by turning the spindle M without disturbing or operating the alarm-gear; and it furthermore provides for the most perfect accuracy and facility as regards the setting of the alarm. Thus the loose wheel N, with attached trip Q, is set so that the notch e' of the trip bears a certain relation with the hour-hand t of the clock, and as the trip revolves in unison with the hour-hand-that is, makes a revolution in the same time as the hour-hand-this relation is necessarily unalterable, so that by setting the trip Q, for instance, with its notch e' to receive within it the stud f' of the spindle M, when the hour hand stands at XII (twelve) the alarm index will also stand at XII (twelve) on its dial; and in any adjustment of the setting-spindle M to change the hour or time of sounding the alarm, both the alarm-index and the hour index or hand will point to the same time on their respective dials when the alarm is sounded.

Any suitable disengaging device may be applied to the clock for disconnecting the alarm, so that it will fail to be sounded when the trip comes round—as, for instance, a lever, R, which may be adjusted to arrest the

hammer G.

We claim-

1. The combination, with the winding-arbor b and mainspring D, of the ratchetwheels g and h, having a fast and loose relation, relatively, with said arbor, and provided with one or more engaging studs or stops, k and l, the loose main alarm-driving wheel e, and the pawls f i, substantially as and for the purpose herein set forth.

2. The alarm-setting spindle M, made capable of independent adjustment, in combination with the alarm-releasing device or trip Q, arranged to rotate loosely upon or around said spindle, essentially as described.

3. The combination of the gears o, N, and p with the hour-hand or its sleeve, and the alarm-trip Q, substantially as specified.

4. The combination of the alarm engaging and disengaging spring hook or lever E, the loose wheel N, with its attached notched trip Q, arranged to rotate in unison with the hourhand of the clock, and the independently-adjustable alarm setting spiudle M, having a stud or projection, f', essentially as and for the purpose herein described.

HENRY J. DAVIES. WALTER D. DAVIES.

Witnesses:

HENRY T. BROWN, FRED. HAYNES.