

Fig. 14 Peerless Eight-day Movement

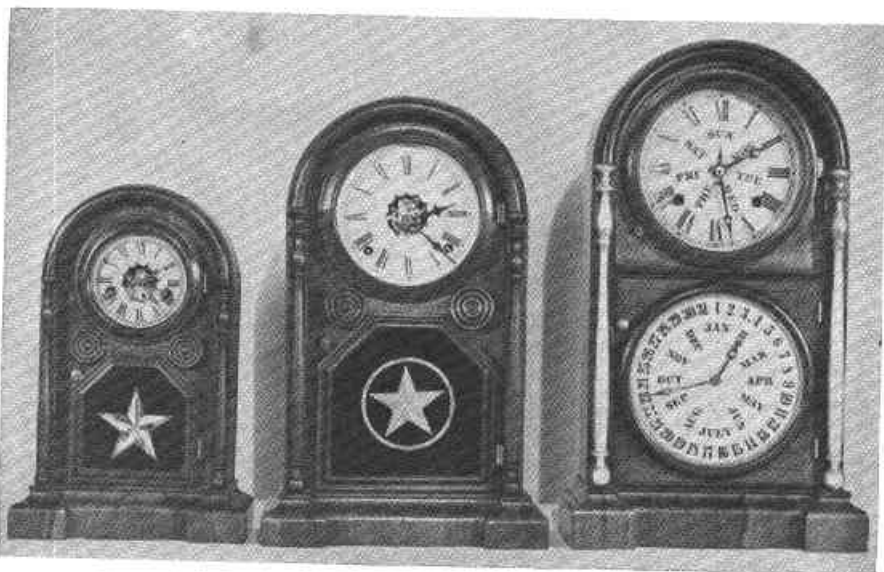


Fig. 15 Italian Models

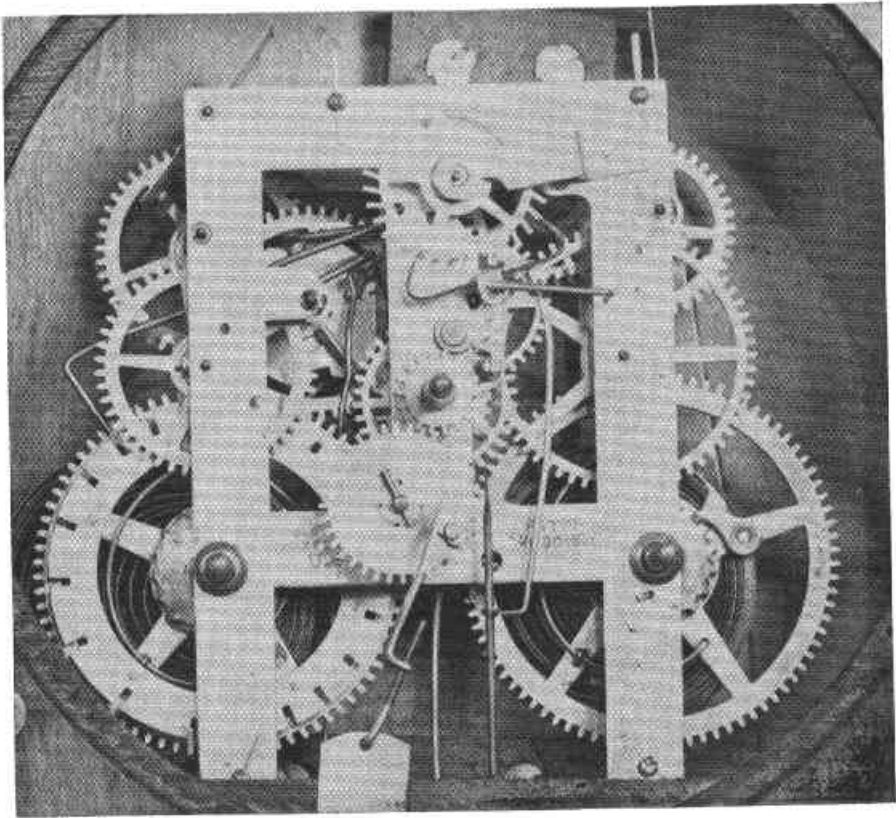


Fig. 16 Italian Eight-day Movement

The Italian No. 1 eight-day time and strike movement was made by the E. N. Welch Manufacturing Company (Figure 16).

The Italian No. 3 one-day time and strike movement was made by the E. N. Welch Manufacturing Company (Figure 17).

SECOND STAGE 1870-1876

By 1870, Welch, Spring and Company had been successful in obtaining exclusive rights to manufacture and use B. B. Lewis' V perpetual calendar mechanism. To clear up a point that has confused clock collectors, let me explain what A. H. Miller refers to as the Y and V mechanisms in his book, *Survey of American Calendar Clocks*.²⁴ The Y mechanism is the style patented by Lewis and used prior to 1871, which was manufactured either by E. Burwell or B. B. Lewis. The

main top plate of the mechanism was made in the shape of the letter Y (Figure 18). In most cases, the Y mechanism will only be found in clocks sold by E. Burwell, L. F. and W. W. Carter, B. B. Lewis, or the S. C. Spring Clock Company. The V mechanism has the same basic design, using the same patents as the Y with the only difference being the method of manufacturing. The V mechanism has the top plate cut out in the shape of the letter V thereby getting its name (Figure 19). When the Welch, Spring and Company received exclusive rights, they redesigned the Y mechanism and converted it into the V style. Redesigning the tooling gave them not only a superior but more economical mechanism. It also gave them a positive identification saying, "this is a Welch, Spring and Company product", and until the company was

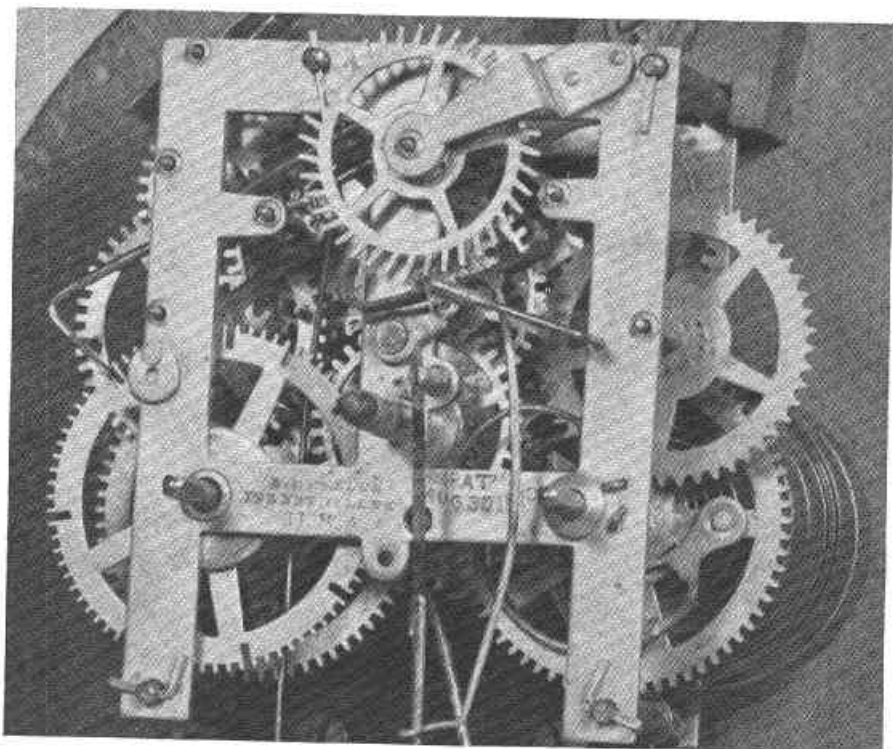


Fig. 17 Italian 30 Hour Movement

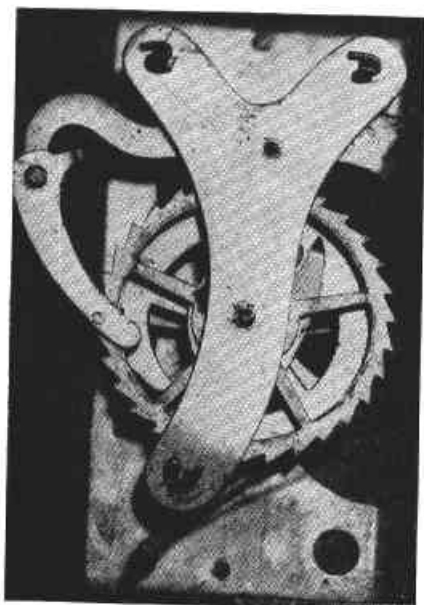


Fig. 18 B. B. Lewis' Perpetual Calendar "Y" Mechanism

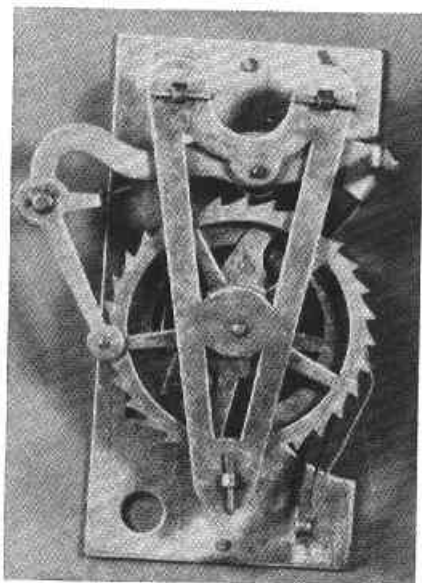


Fig. 19 B. B. Lewis' Perpetual Calendar "V" Mechanism

dissolved in 1884, no one else manufactured the V mechanism.²⁵

Obtaining exclusive rights to the perpetual calendar mechanism and having built new tooling to manufacture it, the Welch, Spring and Company had set the stage for its second growth period, the development of calendar clocks and regulators from 1870 to 1876. During this period, the company only made five calendar and five regulator clocks numbering each series from 1 to 5. Nothing could be more confusing than the method used in assigning numbers to the individual clocks. Even though some of the calendar clocks used the same cases as the regulators, they did not have corresponding numbers. It would appear to have been more logical if the company would have used a numbering system similar to the Howard Clock Company's numbering of their banjo clocks. The Howard Clock Company numbered their clocks in the order of the largest to the smallest, but for some unknown reason, the Welch, Spring and Company did not elect to do this. The system they chose never made sense until one day while I was comparing the Lewis, the Carter, and the Welch, Spring and Company calendar clock cases.

In 1870, when the Welch, Spring and Company entered into the calendar clock business, it had already been making cases for both the Lewis and Carter Clock Companies. Since Carter and Lewis had been using the same numbering system on their calendar clocks, it became apparent that the Welch, Spring and Company chose to do the same; they used the same size and style case as Lewis and Carter had used and added the No. 1, No. 2, and No. 4 Calendar clocks to their own line. To illustrate this point compare Figures 20 and 21 showing the Lewis and Welch, Spring and Company No. 1 Calendar Clock. While Figures 22 and 23 give a good example of the Carter and the Welch, Spring and Company No. 4 Calendar Clock.

Numbering the regulators also became a problem. Prior to establishing a calendar clock line, the company had been producing a thirty-day regulator using a case similar to the B. B. Lewis

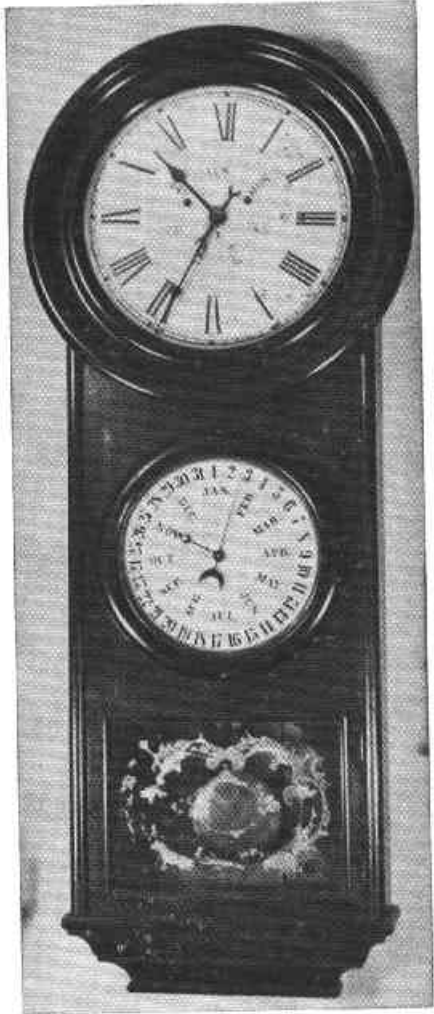


Fig. 20 B. B. Lewis No. 1 Calendar

No. 1 Calendar Clock containing an *upside-down* movement, which they called the No. 1 Regulator. Since the number "1" was already used, they simply made the eight-day model with the No. 1 Calendar case the No. 2 Regulator. Similarly, using the No. 2 Calendar case, they called the new regulator the No. 3 Regulator.

The previously mentioned calendars and regulators all had round top style cases. Shortly after adding the round top calendars and regulators to their clock line, Solomon Spring designed a new case with a *bonnet-top*. With a

new case design, he added the No. 4 and No. 5 Regulators and the No. 3 and No. 5 Calendars to complete the calendar and regulator series. By 1872, the thirty-day No. 1 Regulator was dropped from the line and was replaced in 1874, by the *bonnet-top*²⁶ style eight-day No. 1 Regulator with which most people are more familiar.

Before discussing in detail the individual calendar and regulator clocks that were produced by the Welch, Spring and Company during this period of time, let us take a moment to clarify what I have referred to earlier as the thirty-day *upside-down* movement. Around 1870, the Atkins Clock Company sold a thirty-day time-piece called the *Atkins Extra*. The basic case had the same design as cases used by Carter, Carter and Burwell, Lewis, and eventually the Welch,



Fig. 21 Welch, Spring and Company No. 1 Calendar

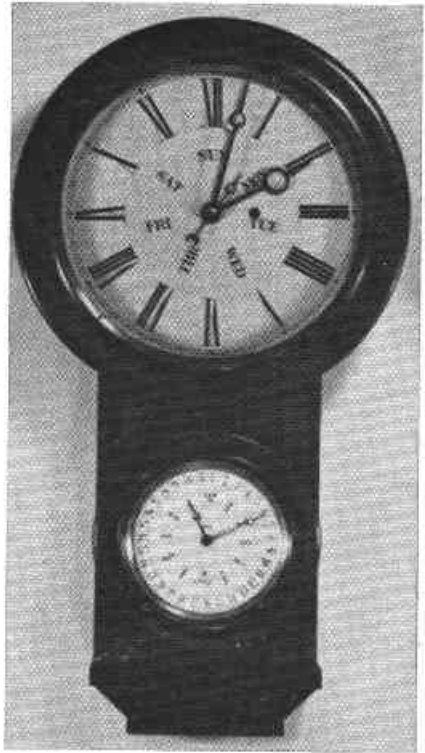


Fig. 22 L. F. & W. W. Carter No. 4 Calendar

Spring and Company. The weight driven *upside-down* movement that it used is similar to the thirty-day fusee movement that was manufactured by the Atkins Clock Company from 1855 to 1860.²⁷ The main difference being, as the name implies, that the movement is mounted upside-down in the case with the verge and escape wheel being at the base of the movement. Although much credit has been given to the Atkins Clock Company for manufacturing both the case and the movement, there are some people who claim that Solomon Spring redesigned the Atkins thirty-day fusee movement and supplied both the case and the thirty-day weight driven movement to the Atkins Clock Company. As we will discuss later, Solomon Spring used an eight-day variation of the *upside-down* movement in some of the original Welch, Spring and Company's calendar and regulator clocks. Since Atkins never used the eight-day movement,

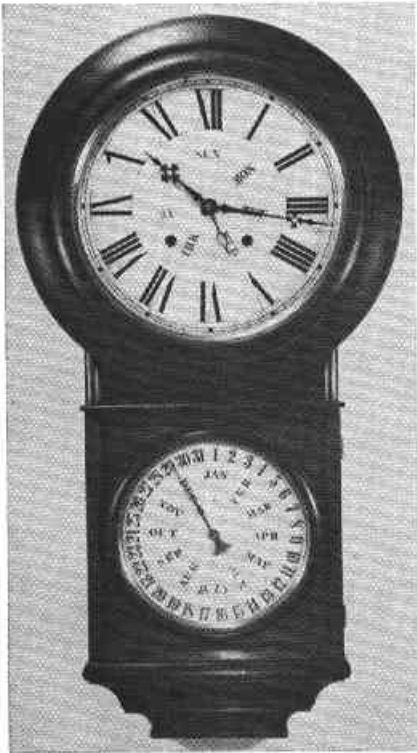


Fig. 23 Welch, Spring and Company No. 4 Calendar

it is more likely that Atkins purchased the thirty-day movement from Solomon Spring or the Welch, Spring and Company. The *Atkins Extra* model shown in Figure 24 has a 6" x 22" x 57" rosewood veneered case, a 16 inch painted dial, a seconds bit, an 8 inch brass pendulum bob, a gold leaf pendulum rod, flocked paper on the back-board, and originally sold for \$38.00. The *upside-down* movement in Figure 25 has .072" x 3 $\frac{3}{4}$ " x 6" solid brass plates, beats seconds, a dead beat escapement, and rolling pinions.

NO. 1 CALENDAR

The No. 1 Calendar (Figure 26), circa 1870-1884, is an eight-day time-piece with the B. B. Lewis V perpetual calendar mechanism. It has a weight driven movement, a 6" x 26" x 53" rosewood and rosewood veneered triple decker case, an 18 inch painted time dial, a 12 inch calendar dial, wooden

bezels, a gold leaf pendulum rod, a brass pendulum regulator emblem, and comes with a clear glass in the lower door. Many of the earlier models had a gold leaf tablet in the lower door. The No. 1 Calendar originally sold for \$35.00.

This No. 1 Calendar movement, as seen in Figure 27, has .100" x 3 $\frac{3}{4}$ " x 6" solid brass plates, lantern pinions, beats seconds, and a dead beat escapement. A few of the original movements, in 1870, came with the *upside-down* movements, as in Figure 25.

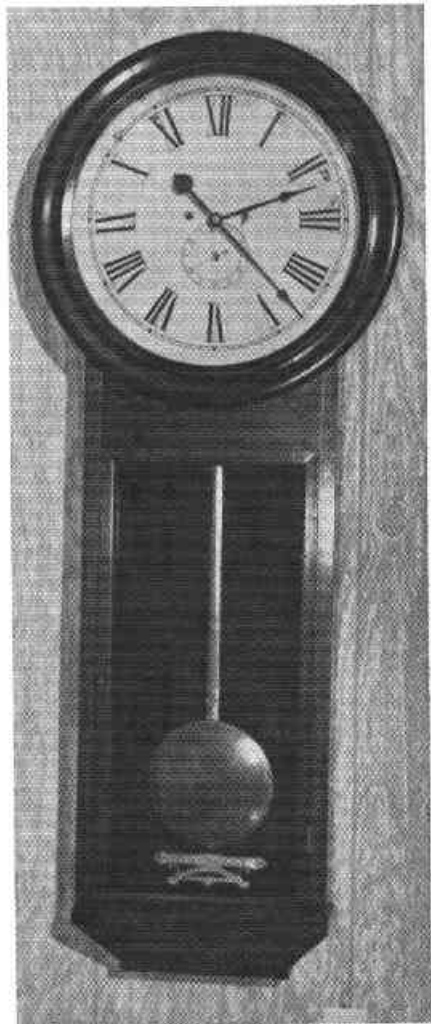


Fig. 24 Atkins 30 Day Regulator