

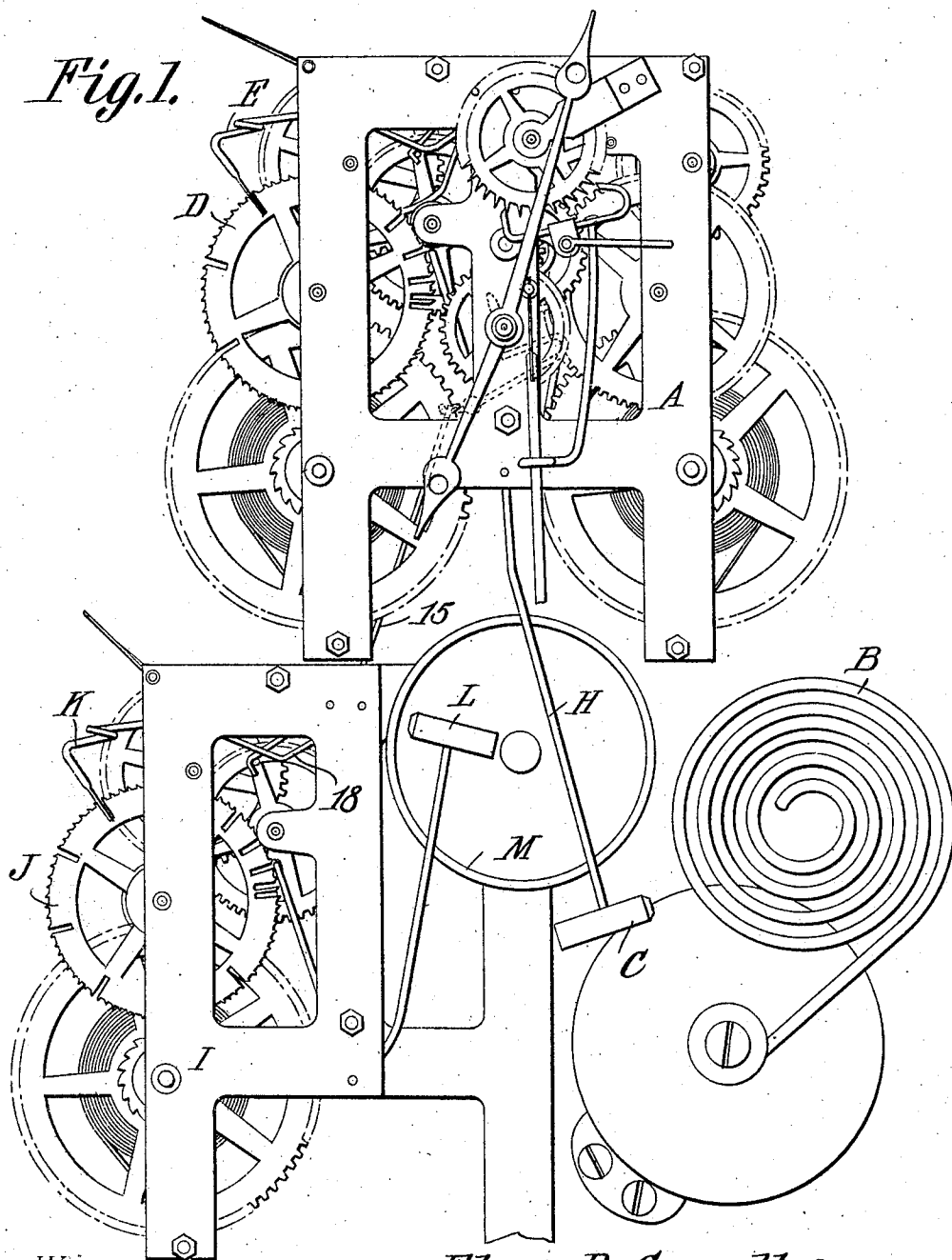
No. 846,781.

PATENTED MAR. 12, 1907.

E. R. CONNELL.
CLOCK.

APPLICATION FILED NOV. 12, 1906.

2 SHEETS—SHEET 1.



WITNESSES:

E. R. Connell
J. W. Parker

Elmer R. Connell, INVENTOR.

By *C. A. Snow & Co.*
ATTORNEYS

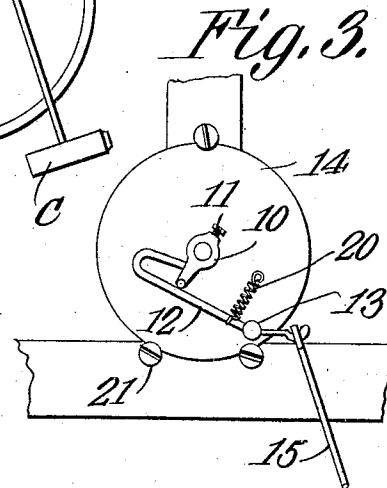
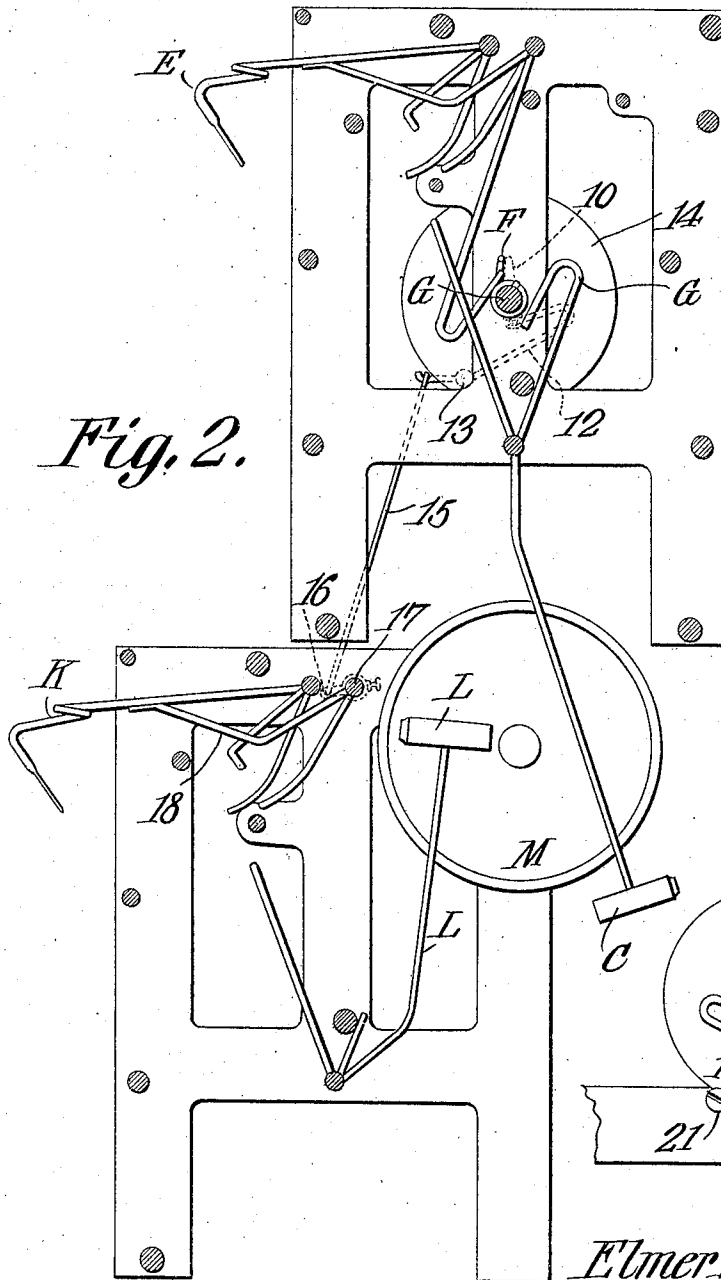
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WITNESSES:

E. J. Stewart
Jno E Parker

Elmer R. Connell,
INVENTOR.

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UNITED STATES PATENT OFFICE.

ELMER R. CONNELL, OF KEYSER, WEST VIRGINIA.

CLOCK.

No. 846,781.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed November 12, 1906. Serial No. 343,122.

To all whom it may concern:

Be it known that I, ELMER R. CONNELL, a citizen of the United States, residing at Keyser, in the county of Mineral and State of West Virginia, have invented a new and useful Clock, of which the following is a specification.

This invention relates to striking clocks, and has for its principal object to provide a means in the nature of an attachment which may be applied to existing clocks for the purpose of more fully designating the time at the half-hours.

A further object of the invention is to provide an attachment for ordinary clocks which strike both the hour and half-hour, by which after the single stroke denoting the half-hour a separate gong will sound the full hour.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a front elevation of a striking clock provided with an auxiliary striking means arranged and constructed in accordance with the invention. Fig. 2 is a detail view illustrating merely the arrangement of the striking-levers and their connections. Fig. 3 is a detail view of a portion of the attachment looking from the rear.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

In Fig. 1 is illustrated an ordinary eight-day clock A, having a gong B, which is struck by a hammer C at each hour and once at each half-hour. The hour periods are under the control of a striking-wheel D, which is engaged by a lever E, the latter being moved to release position by a small crank F, carried by the main arbor G. At the end of the half-hour periods the crank F engages a lever H, which is connected to and operates the hammer C in the usual manner. In addition to this mechanism an auxiliary strik-

ing-train I is employed, this mechanism including a striker-wheel J, a lever K, a hammer L, and gong M, the latter being different in tone from the gong B. The main arbor G is preferably extended some little distance beyond the back of the main frame, and to its outer end is adjustably secured a crank-arm 10, the latter being locked in place by a set-screw 11, so that it may be revolvably adjusted and made to correspond accurately to the main crank F. This crank 10 is arranged to engage a lever 12, that is mounted on a pivot-pin 13, carried by a disk 14 at the rear of the frame, and said lever is connected by an arm 15 to a crank-arm 16, that is carried by a loose arbor 17, said arbor 17 being provided with an adjustable rocker-arm 18, that is engaged to engage the controlling or locking lever K of the striker-wheel J.

In operation the main clock mechanism will operate in the usual manner at the end of each hour to allow the hammer C to strike the gong D, and at the end of each half-hour the crank F will engage the arm H and after wiping past the latter the hammer C will be moved against the gong D, the hammer making but a single stroke to denote the half-hour, as usual. At the same time the crank F leaves the arm H the auxiliary crank 10 will have engaged the lever 12, and forcing the latter down against the stress of the spring 20, and its movement will be transmitted, through the rod 15, to the arm 16, rocking the arbor 17, and the rocker-arm 18 will then lift the lever K of the auxiliary striking-train, so that the latter will operate on the hammer L and the gong M will be sounded a number of times corresponding to the previous hour, or, in other words, if the time be half-past three the hammer C will make one stroke, and then the hammer L will make three strokes, so that the time will be clearly noticed, and as the gangs differ in tone there can be no confusion in the reading of the time.

The disk 14, which carries the pivot-pin 13, is revolvably adjustable, so that the secondary striking-train may be placed in any position with reference to the main clock in accordance with the size of the clock-casing or the construction and arrangement of the parts, this being especially valuable where the device is used in connection with tower-clocks and the like.

I claim—

An attachment for striking clocks of that

class in which both the hour and half-hour
are sounded, comprising an auxiliary gong,
an auxiliary hammer, an auxiliary striking-
train, a controlling-lever for the latter, a
5 rocker-arm for operating said lever, an arbor
carrying said rocker-arm, a crank-pin on the
arbor, a crank-pin adjustably secured to the
main arbor of the clock, a disk adjustably
mounted at a point adjacent to the arbor, a
10 pivot-pin carried by the disk, a lever mount-
ed on the pivot-pin and arranged to be en-

gaged by the adjustable crank, and a con-
necting-rod extending between the disk-car-
ried lever and the arbor crank-pin.

In testimony that I claim the foregoing as 15
my own I have hereto affixed my signature
in the presence of two witnesses.

ELMER R. CONNELL.

Witnesses:

GEO. W. BANE,
E. G. HAMMOND.