

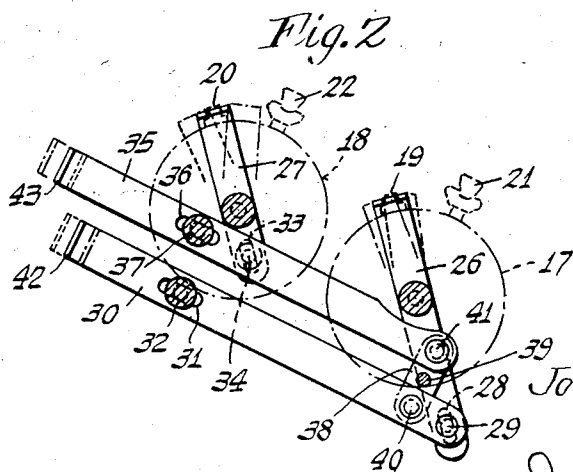
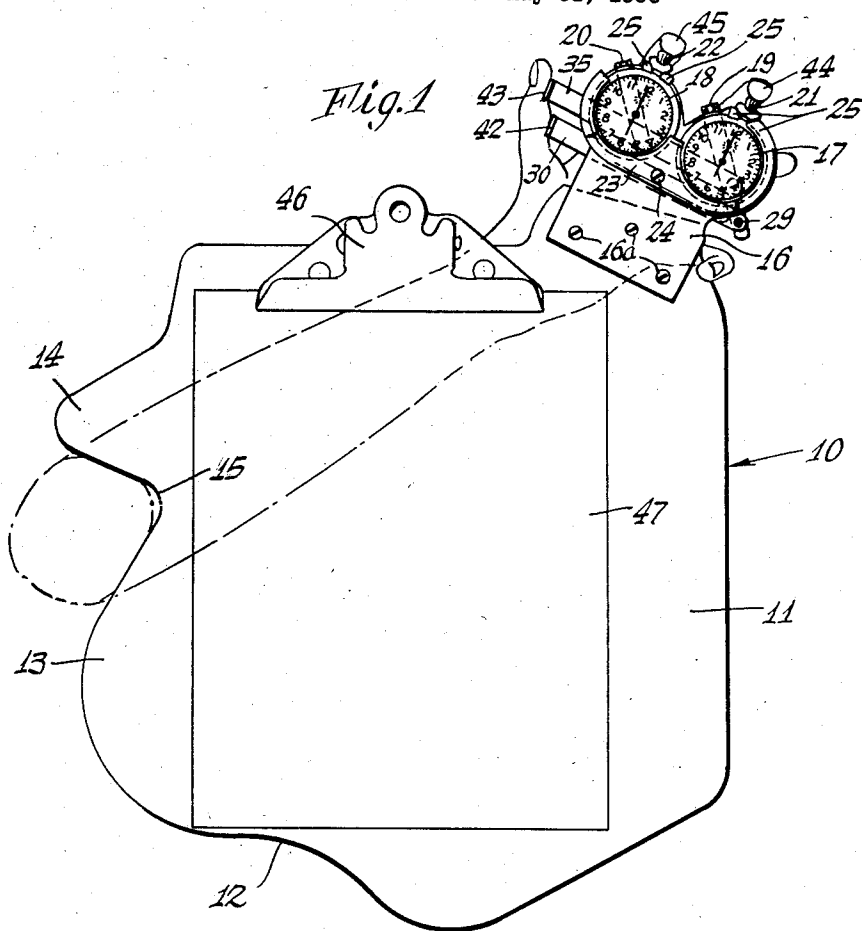
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WRITING BOARD

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WRITING BOARD

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2 Claims. (Cl. 281—44)

The present invention relates to a writing board, and more particularly to a writing board which has a plurality of stop watches thereon for timing events and enabling the writing of the time on paper clamped to the board.

It is an object of the present invention to provide a writing board, having two stop watches thereon, which enables the user, by a single movement to stop one watch and simultaneously start the other watch whereby the user is not compelled to divert his attention from the event he is timing, when the watches are actuated.

Another object of the present invention is to provide a writing board with two stop watches, in which only a single movement of the user's finger can cause both watches to be stopped.

A further object of the invention is to provide a writing board which has an improved configuration in order that the portions thereof which abut the user's anatomy may conform thereto, which renders the board more stable when writing thereon and reduces fatigue of the user.

Another object of the present invention is to provide a writing board of the above type which is light in weight, rigid, inexpensive to make and convenient to use.

The writing board of the present invention has particular utility in the timing of events such as sporting events and time-and-motion studies. Generally, the user of the board holds the board by placing it on the inner side of his forearm with the hand grasping one corner. The corner diagonal from the hand fits against the lower portion of the user's chest with the side adjacent thereto abutting the crook of the arm at the elbow.

A feature of the present invention resides in making the shape of the board to have a concave corner for conforming to the abutting portion of the user's chest and a recess in the adjacent side between two projections, enabling the latter to partially encircle user's arm when the arm is positioned within the recess.

Another feature of the invention is the fastening of two stop watches on the board and providing a mechanical linkage which enables the user upon a single manipulation of his thumb to cause one stop watch to start and the other stop watch to stop. This feature is advantageous since the user does not have to divert his attention from the event he is watching when switching from one watch to the other, and it enables him to read and write down while a second event is occurring, the time indicated by the stopped watch. Both of the watches are so positioned that either way may be returned to zero by the fingers of the same hand engaging the adjacent corner of the board.

Other features and advantages will hereinafter appear. In the drawings:

Figure 1 is a plan view of the writing board and also the relationship between the user's arm and hand and the board is illustrated.

Fig. 2 is a view of the actuating mechanism for the stop watches, the watches being shown in dotted lines.

Referring to Fig. 1, in the form shown, the writing board, generally indicated by the reference numeral 10, comprises a flat board 11 which is of generally rectangular

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configuration and may be formed from any suitable material which is sufficiently stiff or rigid to provide a proper backing for the sheets to be written upon and yet is preferably sufficiently light to minimize fatigue of the user.

Accordingly, the material may be plastic, pressed wooden fiber board, or a board of wood. As shown in Fig. 1, the lower left hand corner of the board 11 is concavely curved as at 12 to provide a surface for fitting the lower portion of the chest of the user. On the side adjacent the curve 12, two projecting portions 13 and 14 are formed to provide a recess 15 therebetween. The portion 13 is shaped to comfortably fit between the user's arm, the portion thereof at or slightly above the elbow, and his chest, while the projecting portion 14 is adapted to partially extend around the outside portion of the arm. The recess 15 accordingly is shaped to partially encircle the user's arm as shown in Fig. 1.

Diagonally across the board from the curved corner 12, a flat extension 16 is shown as a separate piece fastened, as by screws 16a to the board 11, but if preferred may be formed integrally therewith, and holds two stop watches 17 and 18. The stop watches are preferably of the type that employ side slides 19 and 20 for starting and stopping the watches and a depression of the crowns 21 and 22 for returning the hands to zero. A clamp member 23 is fastened to the extension 16 by a screw 24 to hold the watches in place and also tabs 25 are formed on the extension 16 to hold the watches adjacent the crowns thereof. As illustrated in Fig. 1, the crowns project beyond the edge of the extension 16 in order to permit manipulation thereof.

According to the present invention, means are provided to enable operation of both watches, one to a start position and the other to a stop position, by a single movement of the user's thumb. This feature of the invention enables the timer to continually watch the events being timed and to record the time at his convenience. In addition, successive portions of a single continuous event may be individually timed. The means for accomplishing the above includes two pivoted levers 26 and 27 having end portions engaging the side slides 19 and 20 respectively. The levers 26 and 27 are mounted by means of pivots 26a and 27a respectively on the undersurface of the extension 16. The ends 26b and 27b of the levers 26 and 27 respectively are bent upwardly at right angles and have a U-shaped cut-out therein into which the side slides of the watches fit to be engaged by the legs of the U. These ends of the levers preferably move along the same arc as the side slides and thus in the embodiment shown, the levers are pivoted on the extension 16 in alignment with the center of the watches. The end of the lever 26 remote from the side slide is provided with an elongate slot 28 into which a pin 29 is fitted. The pin 29 is fastened on a slidable member 30 which also has an elongate slot 31 therein containing a pin 32 which projects from the extension 16. Similarly the lever 27 has a slot 33 into which a pin 34 is fitted and the pin 34 is fastened to a slidable member 35. The member 35 has a slot 36 with a pin 37 therein and the pin 37 is fastened to the extension 16. It will be apparent from the above construction that lengthwise movement of the members 30 and 35 will cause a pivoting of the levers 26 and 27 respectively, with a consequent movement of the side slides. To enable one slidable member to operate both watches, which requires that the levers 26 and 27 move in opposite directions in order to stop one watch and start the other, a link 38 pivoted to the extension 16 on a pin 39 is provided. The opposite ends of the link are pivotally connected by pins 40 and 41 to the members 30 and 35, respectively. Each of the pins are provided with heads and/or washers to maintain the pins in place. The pivots 26a and 27a, and the pins 32, 37 and 39 are shown cross-hatched in Fig. 2 since this view is taken in a plane parallel to the under-

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surface of the extension 16 with these elements extending into and being fastened to the extension 16.

In the operation of the board, the user positions his arm so that his thumb is in engagement with bent-over end portions 42 and 43 of the members 30 and 35 and the underside of the board 11 rests on the inside surface of the user's forearm. The projections 13 and 14 partially encircle the user's arm adjacent the elbow and the concave curve 12 abuts the lower chest. Longitudinal movement of the member 35 toward the watches causes the lever 27 to pivot counterclockwise and move the side slide 20 to the start position. Also this movement moves the link 38 in a clockwise direction, causing the member 30 to longitudinally move away from the watches with a clockwise movement of the lever 26 to cause the side slide 19 to move to its stop position. Conversely, movement of the slide 30 toward the watches causes the slide 19 to be moved to the start position and the slide 20 to be moved to the stop position. The former position of the elements is shown in dotted lines in Fig. 2 while the latter position is shown by dot-dash lines.

To reset the watches to zero, the crowns 21 and 22 are pressed by the middle and index fingers (indicated by reference numerals 44 and 45), respectively. The location of the crowns and the ends 42 and 43 of the members 30 and 35, enable the user to operate these elements without requiring his visual attention, as the user by the position of his fingers and thumb, can sense which watch is operating, stopped or returned to zero. In addition, the location of these elements are such as to enable them to be operated comfortably by the user, even over a long period of time.

In Fig. 2, the various elements are shown in the solid line position at the mid-point of their path of travel and at this position, both watches are stopped. While this may be accomplished by having a lost motion connection between the link 38 and the members 30 and 35, in the instant embodiment disclosed herein, watches of the type in which, when the side slide is at the mid-point of its path of travel the watch is stopped, are utilized. Accordingly, the length of movement of the slide and levers 26 and 27, in which the watch is stopped is longer than the length of movement of the slide when the watch is going, but the difference is small enough so that when the member 30 or 35 is moved from end to the other of its longitudinal travel, one watch will start and the other stop, substantially simultaneously.

As shown in Fig. 1, the board 11 is preferably provided with a spring biased clamp 46 of any suitable design to hold sheets of writing paper 47 in place. If desired other devices, such as pencil, eraser etc. holders may be attached thereto.

It will be perceived from the foregoing that by the present invention a writing board which assures firmness and stability in use, yet with a minimum of fatigue of the user by reason of its configuration has been provided. In addition, by the provision of an actuating means for the stop watches, the user can operate the watches without diverting his attention from the event being timed and through the position of his fingers, without requiring

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visual attention, sense whether watch is going or not, or if it has been reset to zero or if both watches have been stopped or reset.

Variations and modifications may be made within the scope of the claims and portions of the improvements may be used without others.

I claim:

1. A writing board adapted to hold two stop watches for use in the timing of events and for enabling the writing of the time on paper positioned on the board comprising a flat board of relatively stiff material; means on the board for holding only two stop watches of the type having an actuatable element for starting and stopping the watch; and manual operable means adapted to be connected to the elements of the watches for moving one element to start its watch and moving the other element to stop its watch; in which the actuatable element of each watch is a side slide; and in which the manually operable means includes a lever for each watch pivotally mounted on the board connectible to each side slide and linkage including two members slidably mounted on the board, each member being connected to one of the pivoted levers, and a link pivotally mounted on the board between the slidable members and connected to the slidable members for pivoting one lever in one direction and the other lever in the opposite direction.

2. A writing board adapted to hold two stop watches for use in the timing of events and enabling writing of the time on paper clamped to the board, comprising a flat, substantially rigid board having a generally rectangular shape; one corner of said board being concavely curved; a side adjacent thereto having two projecting portions to define therebetween a recess; an extension at the corner of the board diagonally across from the curved corner; clamp means on the extension for holding two stop watches of the type having a side slide for stopping and starting the watches; and manually operable means including a lever for each watch pivotally mounted on the board connectible to each side slide and linkage including two members slidably mounted on the board, each member being connected to one of the pivoted levers, and a link pivotally mounted on the board between the slidable members and connected to each member whereby manipulation of one slidable member in one direction causes the lever connected thereto to pivot and move the side slide to the start position of one watch and causes the other slidable member to move in the other direction to cause the lever attached thereto to move in the opposite direction to move the side slide of the other watch to the stop position.

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