

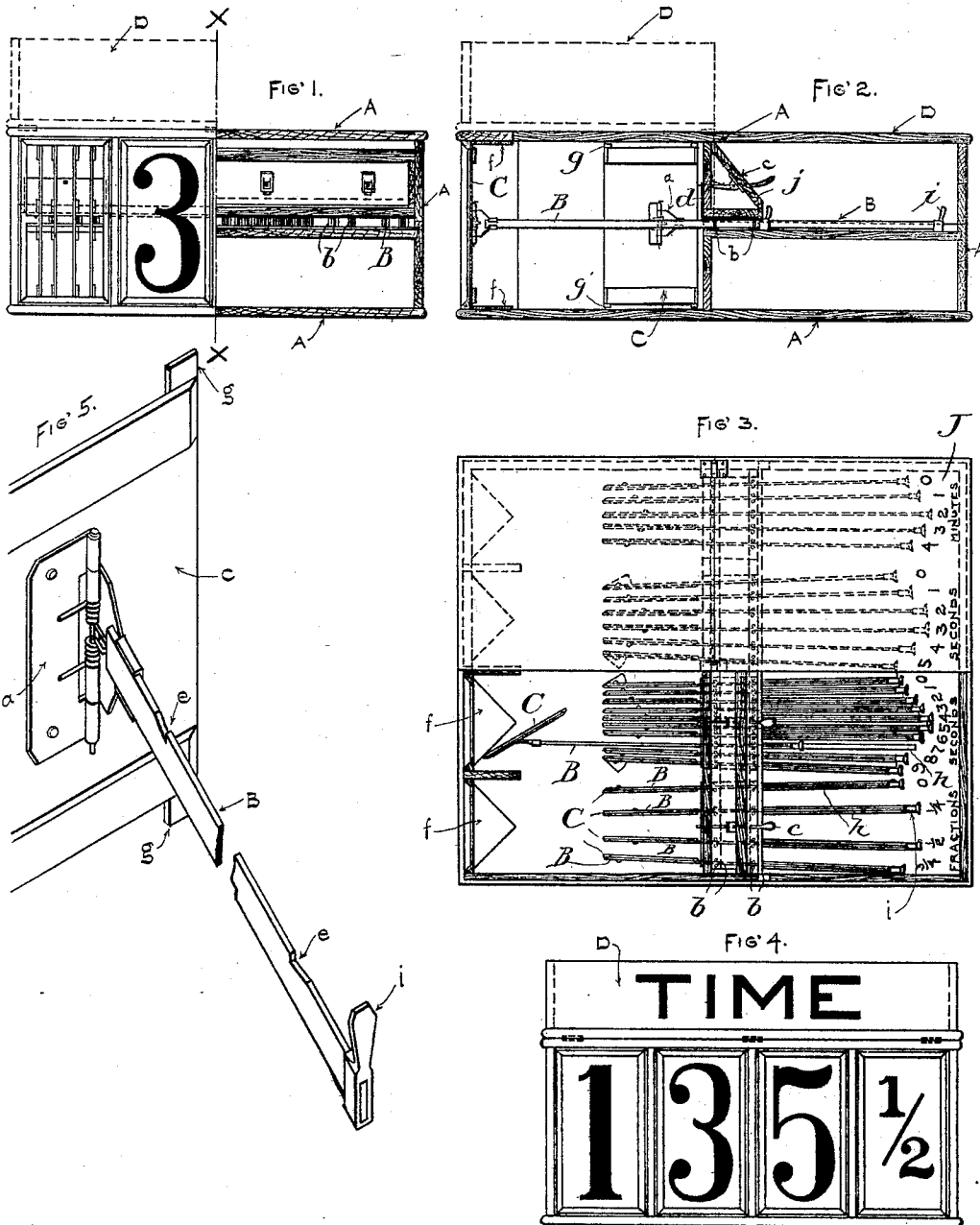
(No Model.)

2 Sheets—Sheet 1.

A. FOLGER & W. H. WINDER.
GAME COUNTER.

No. 529,118.

Patented Nov. 13, 1894.



WITNESSES:
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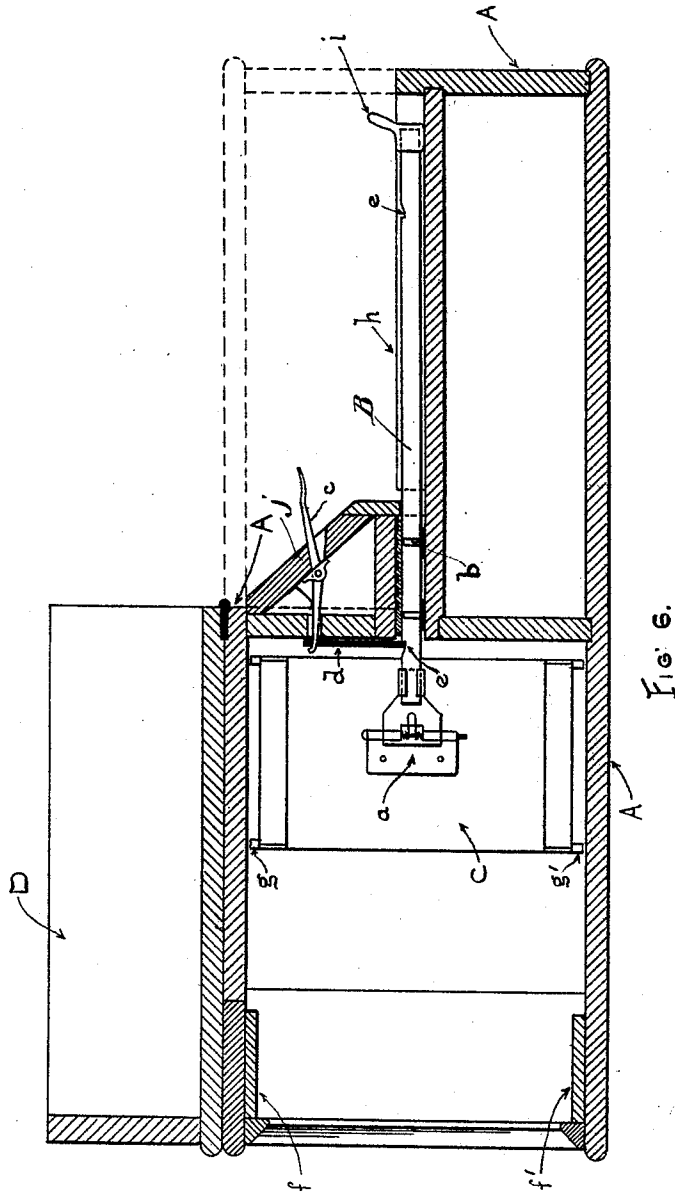
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WITNESSES:
M. S. Colley
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UNITED STATES PATENT OFFICE.

ARTHUR FOLGER AND WILL H. WINDER, OF CINCINNATI, OHIO.

GAME-COUNTER.

SPECIFICATION forming part of Letters Patent No. 529,118, dated November 13, 1894.

Application filed July 24, 1893. Serial No. 481,367. (No model.)

To all whom it may concern:

Be it known that we, ARTHUR FOLGER and WILL H. WINDER, citizens of the United States, residing at Cincinnati, county of Hamilton, and State of Ohio, have invented a new and useful Indicator or Display Apparatus for Races, Games, and other Purposes, of which the following is a specification.

Our invention relates to apparatus for indicating time, points, scores, or other similar matter for convenience in races, games, and other desirable purposes, the novel features of which will be fully hereinafter described and particularly pointed out in the claims.

In the accompanying drawings—Figure 1 is a front elevation partly in section of our invention, the hinged rear lid or cover for the key-mechanism being shown closed, but (in dotted lines), in the elevation-portion to the left, it is shown open; Fig. 2, a longitudinal sectional elevation, taken on line *x, x*, of Fig. 1; Fig. 3, a plan view of Figs. 1 and 2, showing one of our indicator plates or shields in the act of being projected forward to display position; Fig. 4, a front elevation of our invention, as it appears in full use, with a complete line of figures or symbols in sight, say, to indicate the running-time of the race then before the spectators; Fig. 5, a detail perspective view, partly broken, showing one of our display-plates and its operating keyed-rod, including also therein the spring-device on the back of said plate or shield, for automatically returning said shield in line parallel to its said operating-rod in the backward or retreating movement after an indication; and Fig. 6, a longitudinal sectional elevation similar to Fig. 2, but on a larger scale (almost one-third full-size), showing all the display-shields back in their normal position, and the apparatus as it appears when not in active use, (but with the back-lid thrown open in solid lines, and closed in dotted lines.)

A represents the case or box in which the mechanical apparatus of our invention is inclosed.

B represents a keyed or handled rod.

C represents a plate or shield, to which is attached the keyed-rod B, by means of spring hinge *a*, by which the said shield is automatically returned to normal position on withdrawal from a front opening.

b b' represent guide-pins between which keyed-rod B, takes or is guided in its forward and backward movements. There are four pins for each rod, arranged in two pairs, one in front of the other, one pin of each pair being on one side of the bar and the other one on the other side. The rods of each set are arranged to slightly approach each other at their outer ends and the outside rods of each set are each pivotally secured to its respective plate nearer the edge than the central ones, so that when each rod has been pushed out as far as it will go, its shield will have been thrown into its display position.

c represents a spring-latch or catch for the purpose of raising or lowering the plate *d*, which, by engaging notches *e e'*, hold or lock keyed-rods B, in their respective forward and backward positions.

f, and *f'*, represent an upper and lower guide-wedge, which, when engaged by projections *g, g'*, on either of the shields C, direct said shields in place for their respective display.

h represents a groove provided for the purpose of assisting guide pins *b b'* in guiding keyed-rods B in their forward and backward movements.

i represents a key or handle at the inner end of rod B for the purpose of grasping it with the thumb and finger in operating it.

j represents a numbered and lettered keyboard, on which figures are placed rearwardly of each keyed-rod to correspond with that figure which is on the front-face of that particular plate or shield attached by spring-hinge to the opposite end of its said keyed-rod.

D represents a hinged rear lid or cover for the keyed mechanism, on the rear side of which lid may be printed the word "Time," which, when said lid is thrown open, the said word "Time" is displayed at the forward part of case or box, above the figures indicating the record of the race then before the spectators.

We claim—

1. In an indicator or display apparatus, the combination, with a frame, of a series of longitudinally movable rods therein, each of which rods is provided with a shield or plate pivotally secured to one end thereof, and adapted to be displayed within the frame

when the rod is moved in one direction and to be concealed when the rod is moved in the opposite direction, said plate being adapted to stand at right angles to the rod when exposed and lie parallel therewith when hidden, and means for causing the plate to turn as the rod is being moved back and forth, substantially as set forth.

2. In an indicator or display apparatus, the combination, with a frame, of a series of longitudinally movable rods therein, a spring actuated display shield or plate pivotally connected with one end of each rod, and adapted to normally lie parallel with the rod, and means for moving the shield to a position at right angles to the rod when the rod is moved in one direction, substantially as set forth.

3. In an apparatus for displaying time, points, or other information desirable in races, games, and other purposes, the combination of a suitable frame or casing having one or more fore openings or sights, one or more display shields or plates, provided with projections and adapted to said sight or sights, one or more operating rods or bars each pivotally connected at one end to a display shield intermediate the ends thereof and projecting rearwardly to a key-board from whence the operator may conveniently reciprocate said display-shield to and from its display-opening, and one or more switch-blocks in the said frame or casing at the rear of each of said fore-openings, substantially as herein set forth.

4. In an apparatus of the kind described, the combination of a suitable casing or frame having a series of fore openings or sights therein, a number of display shields or plates adapted to said fore-sights, longitudinal rods or bars, each pivotally connected or hinged at one end to each of said shields and projecting rearwardly to and along a suitably grooved and numbered or lettered key-board, flat switch-blocks or guide-wedges within said casing at the rear of the top and bottom of each of said fore-sights, and projections at top and bottom of said display-shields engaging or impinging against the said switch-blocks in the reciprocations of the operating-rods and said shields, whereby the latter are directed into place in their respective display-openings, and mechanism on the back

of the shields for automatically returning said shields to their normal positions in line with their reciprocating-rods for their backward movement into the casing after an indication, substantially as herein set forth.

5. In an apparatus of the kind described, the combination of a suitable casing or frame having a series of fore openings or sights therein, a number of display shields or plates adapted to said fore-sights, longitudinal rods or bars each pivotally connected or hinged at one end to each of said shields and projecting rearwardly to and along a suitably grooved and numbered or lettered key-board, latch-devices on the frame engaging notches in said rods, tapering switch-blocks or guide-wedges within said casing at the rear of the top and bottom of each of said fore-sights, and projections at top and bottom of said display-shields engaging or impinging against the said switch-blocks in the reciprocations of the operating-rods and said shields, whereby the latter are directed into place in their respective display-openings, and mechanism on the back of the shields for automatically returning said shields to their normal positions in line with their reciprocating-rods for their backward movement into the casing after an indication, substantially as herein set forth.

6. In an apparatus of the kind described, the combination with a display shield or plate having a vertical projection at one or more of its corners, and one or more switch-blocks or guide-wedges mounted in a suitable casing provided with a display-opening for accommodating said shield, of a reciprocating key-rod or pull and push bar pivotally connected or hinged at one end to the back of said shield, and mechanism also on the back of said shield, forming part of said hinge-connection and automatically returning said shield to its normal position folded back against its operating-rod, after an indicating-operation, in contact with said switch or guide-wedge, substantially as herein set forth.

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Witnesses:

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