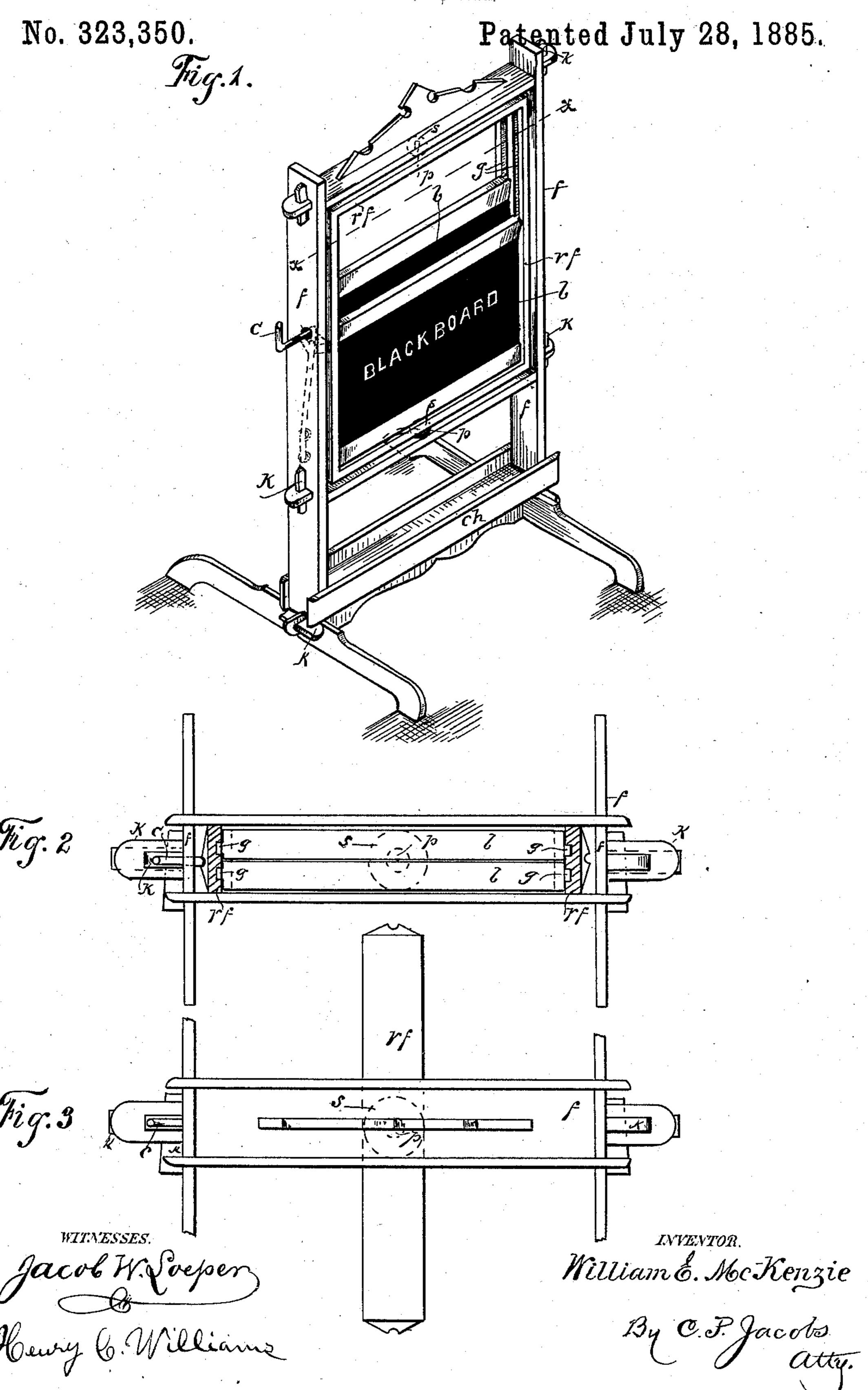
W. E. McKENZIE.

BLACKBOARD.



United States Patent Office.

WILLIAM E. MCKENZIE, OF ZIONSVILLE, INDIANA.

BLACKBOARD.

SPECIFICATION forming part of Letters Patent No. 323,350, dated July 28, 1885.

Application filed January 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. MCKEN-ZIE, a resident of Zionsville, Indiana, have made certain new and useful Improvements in Blackboards, a description of which is set forth in the following specification, reference being made to the accompanying drawings, in the several figures of whichlike letters indicate like parts.

My improvement consists in combining in a stationary frame a revolving frame which contains a series of blackboards adapted to slide in grooves in the revolving frame, and will be understood from the following descrip-

15 tion.

In the drawings, Figure 1 represents an isometric view of my device. Fig. 2 represents a cross-section on the line xx. Fig. 3 represents a top view, the revolving frame being swung around so as to be substantially at right angles to the stationary frame.

In detail, f f is a stationary frame resting upon two feet, the cross-pieces of such frame having tenons entering the uprights through mortises and secured by keys k, for the purpose of allowing this stationary frame to be taken apart and compactly packed for shipment.

r f is a revolving frame, which is adapted, by means of pivots p on its ends which have bearings in socket-plates s attached to the top and bottom cross-pieces of the stationary frame, to revolve in such stationary frame, and it may be locked in position by means of

35 the catch c.

b b are blackboards, which are fitted to slide easily in the grooves g, formed in the sides of the uprights of the revolving frame. This revolving frame may be made wide enough to allow a series of grooves to be made on the inside of its uprights, and a separate board is fitted to slide in each one of these grooves. The boards are made about half the height of the revolving frame, so that two boards will fill its opening, and when one side of one or more boards has been used, by revolving the frame on its pivots the other side of the board will be presented for use. When one board has been filled with work, it may be pushed 50 down in its groove and another board raised,

so on, successively, until all are used. By providing a number of these boards in the same frame, a series of lessons once put upon the boards may be preserved for some time. Thus, if six boards are used, they will carry 55 twelve lessons, and by this means the teacher will be enabled to present them successively for review without being compelled to re-write them upon the boards.

c h is a grooved strip or box for holding 60

chalk.

I am aware that revolving blackboards are not new, and that blackboards adapted to slide in grooves in frames are not new, and do not broadly claim such as my invention; but 65 I am not aware that any blackboard has been made prior to my invention, wherein a frame adapted to revolve upon pivots within the stationary frame has also been provided with grooves in which blackboards are made to 70 slide, as shown in my device.

Maps or diagrams may, of course, be either temporarily or permanently put upon the sliding boards of my device, and they may be used for such purposes, as well as for ordinary 75

blackboards.

When a board is shoved up to the top of the revolving frame, it may be secured in that position by means of a catch or pin, or any other suitable device.

What I claim, and desire to secure by Let-

ters Patent, is-

1. A lesson-board wherein a revolving frame containing two or more boards adapted to slide in grooves formed in the sides of such 85 revolving frame is adapted to revolve on pivots having bearings in an outside stationary frame, substantially as described.

2. In a lesson-board, the stationary frame ff, the revolving frame rf, having pivots p, 90 adapted to revolve in socket-plates attached to the stationary frame, the boards b, adapted to slide in grooves g on the inside of the revolving frame, and the catch c, for locking such revolving frame in place, all combined 95 substantially as described.

3. In a lesson-board, the stationary frame ff, its parts secured by keys k, the frame rf, adapted to revolve in the frame ff on pivots p, the boards b, sliding in grooves g, formed 100

on the inside of the revolving frame r f, and |the catch c, all combined substantially as described.

4. In a lesson board, the stationary frame 5 ff, provided with chalk-box ch, catch c, socket plates sp, the frame rf, revolving in such stationary frame on pivots p, and the boards b, sliding in grooves g, formed on the inside of

the revolving frame rf, all combined substantially as described.

In witness whereof I have hereto set my hand this 10th day of January, 1885. WILLIAM E. McKENZIE.

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Witnesses:

WM. E. BARTON, C. P. JACOBS.