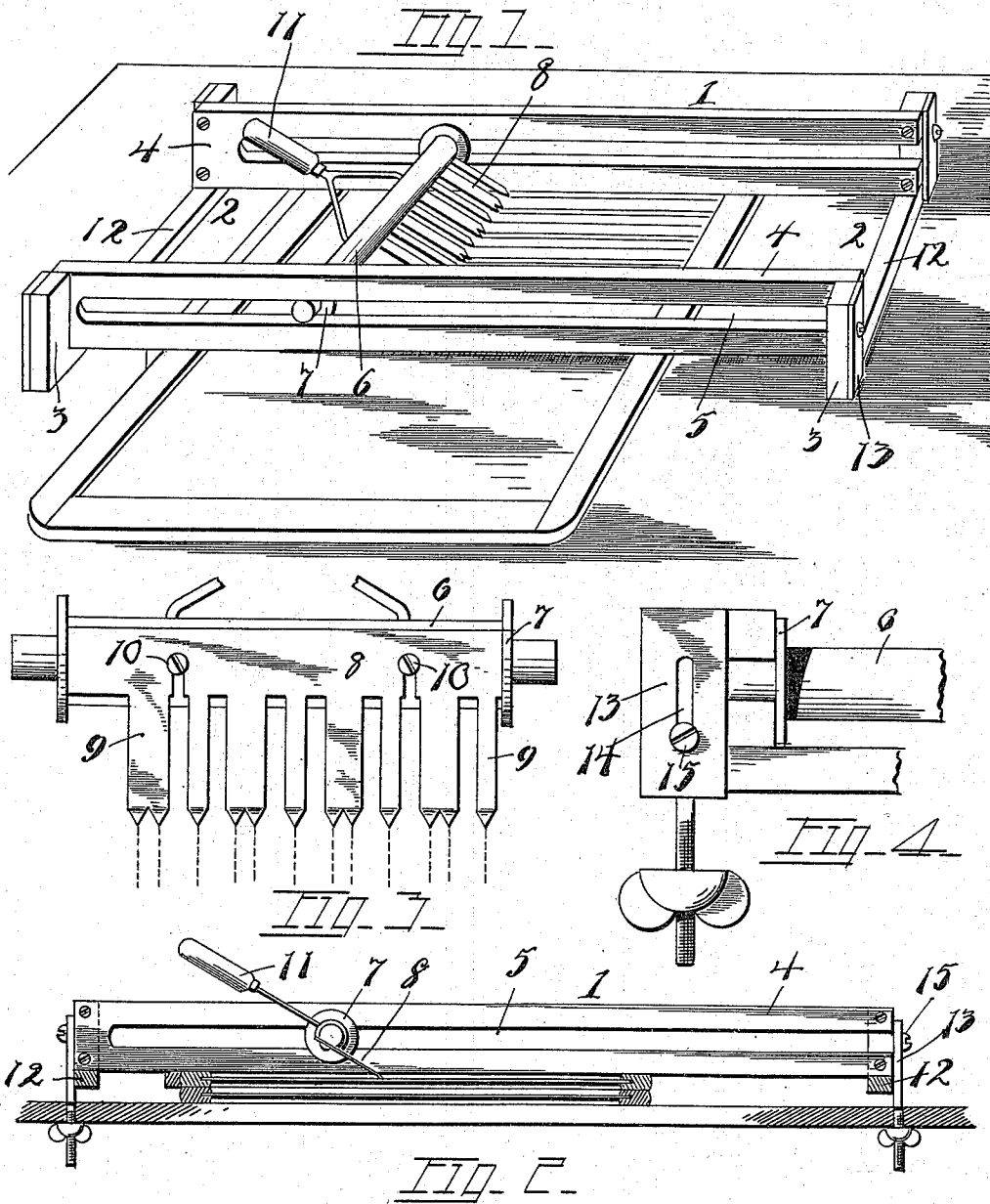


(No Model.)

E. F. H. WESTENFELD.
RULING MACHINE FOR SLATES.

No. 573,843.

Patented Dec. 22, 1896.



WITNESSES

Carl H. Keller.
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UNITED STATES PATENT OFFICE.

E. F. HERMAN WESTENFELD, OF TOLEDO, OHIO.

RULING-MACHINE FOR SLATES.

SPECIFICATION forming part of Letters Patent No. 573,843, dated December 22, 1896.

Application filed April 16, 1896. Serial No. 587,745. (No model.)

To all whom it may concern:

Be it known that I, E. F. HERMAN WESTENFELD, of Toledo, county of Lucas, and State of Ohio, have invented certain new and useful Improvements in Ruling Mechanism for Slates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form part of this specification.

My invention relates to a ruling mechanism for slates, and has for its object to construct an inexpensive and conveniently-operated ruler by which the process of ruling a slate is expedited and perfect accuracy insured.

The invention broadly consists in a vertically-adjustable frame having guideways in which moves a marker of any desired construction with reference to the lines and spaces.

In the drawings, Figure 1 is an elevation of the complete ruler, showing a slate secured beneath the same. Fig. 2 is a side elevation showing the adjustment by which a double slate may be placed beneath the frame. Fig. 3 is a plan view of the movable head and marker or ruling-plate. Fig. 4 is a sectional detail view showing the end standard and adjusting mechanism.

1 designates a frame comprising end sections 2, having standards 3 at each end, to which are secured side pieces 4, (one upon each side of the frame,) having guideways 5 extending longitudinally of the side pieces. Movably secured in the guideways is a head 6, having enlargements 7 to prevent disproportionate travel of either end in moving the head the length of the guideways, and upon the under side is secured a plate 8, having a plurality of marking projections 9, preferably arranged in alternation with single and double points, respectively, whereby, if desired, the slate may be ruled with alternating single and double rulings. Plate 8 is preferably

secured to the head by screws 10 to allow of convenience of removal if desired to substitute a plate adaptable for a different ruling.

Attached to the rear side of the head is a handle 11, by which to move the ruler to and fro in the guideways of the frame. The body portions 12 of the end sections are intended to normally raise the side sections a sufficient height when resting upon a table or desk to allow of conveniently inserting a slate beneath the side rails.

The entire frame is secured fixedly to a table or desk by means of metal plates 13, having elongated openings 14, through which screws 15 pass and are secured to the end standards, the lower ends of plates terminating in screw-rods upon which thumb-screws are run.

It will be readily seen that by this manner of securing the device it is normally adaptable to slates of ordinary thickness of frame. If, however, it is desired to rule a double slate, the frame can be conveniently raised the necessary height by loosening screws 15 and raising the frame the proper height, under which screws are again tightened and the frame permanently held.

What I claim is—

1. In a ruling mechanism for slates, a table, a frame having longitudinal ways or guides, a ruling mechanism movably secured therein, and means for adjusting the frame vertically above the table.

2. In a ruling mechanism for slates, a table, a frame having longitudinal ways or guides, a ruling mechanism movably secured therein, plates adjustably secured to the frame having depending rods screw-threaded upon the lower end to receive nuts to attach the plates to the table.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

E. F. HERMAN WESTENFELD.

Witnesses:

PETER J. MUELER,
CARL H. KELLER.