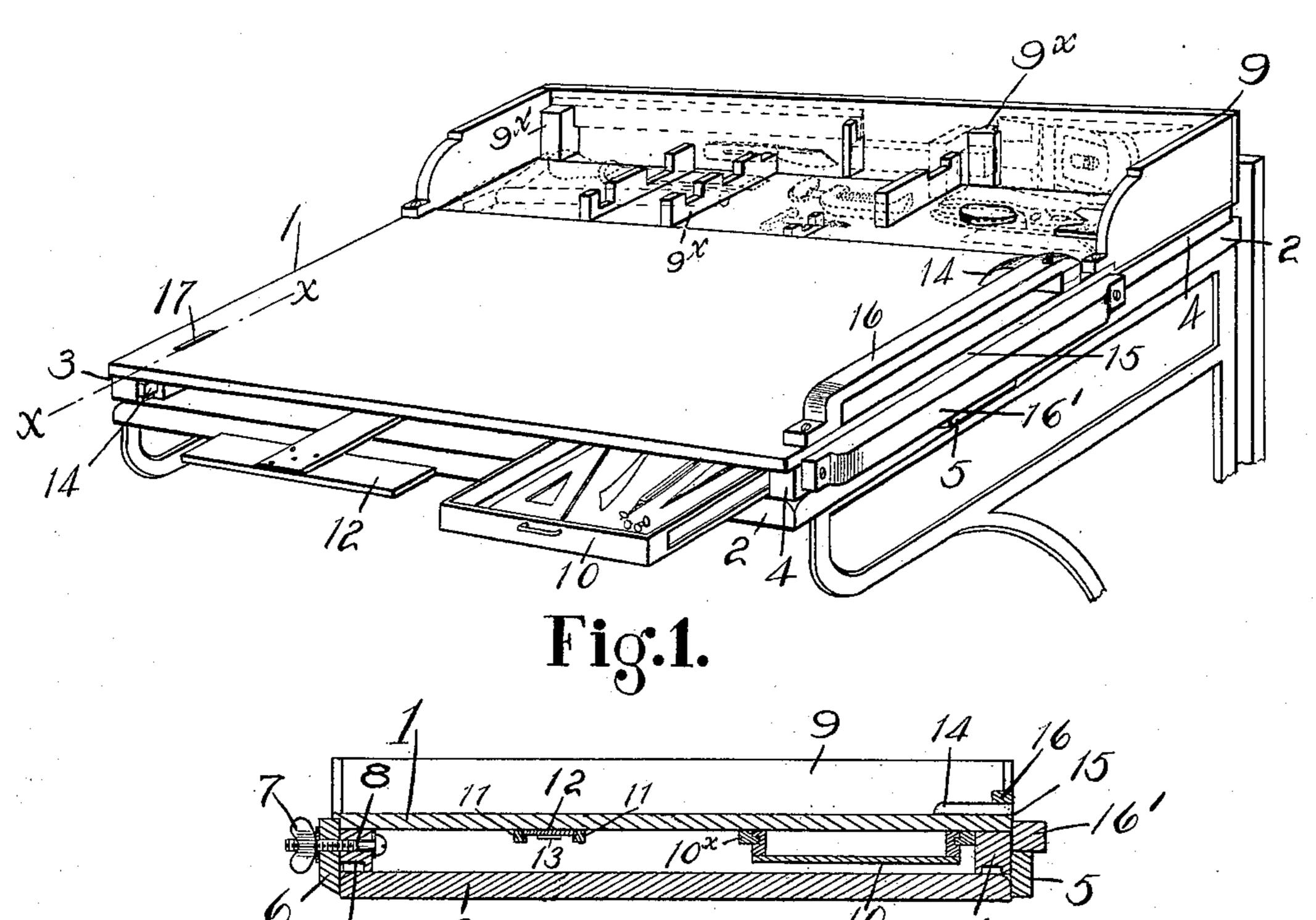
No. 607,187.

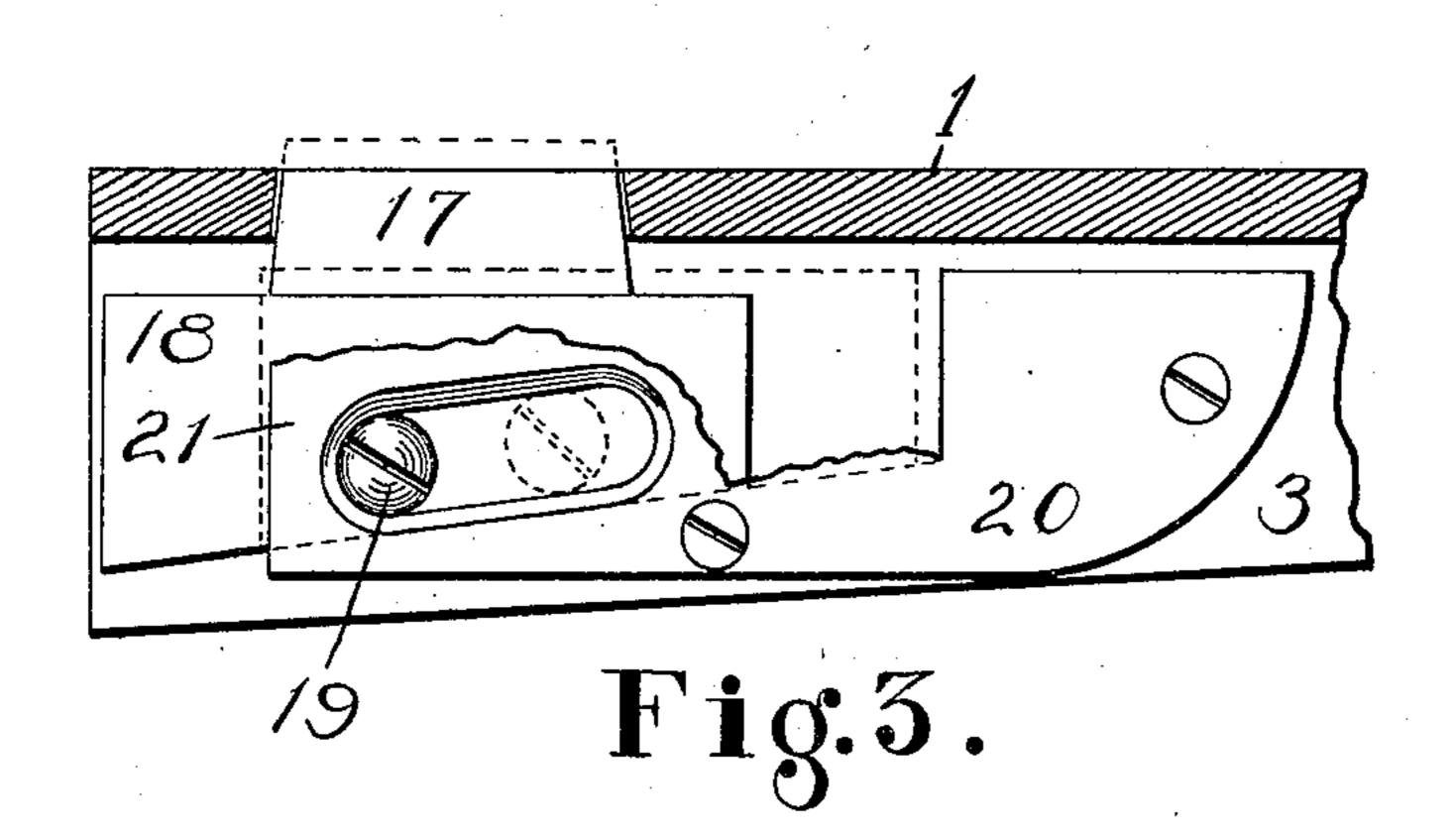
Patented July 12, 1898.

W. W. MURRAY. DESK ATTACHMENT.

(Application filed Aug. 4, 1897.)

(No Model.)





Witnesses.

Grace at France

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WILLIAM W. MURRAY, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE ROCHESTER ATHENAEUM AND MECHANICS INSTITUTE, OF SAME PLACE.

DESK ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 607,187, dated July 12, 1898.

Application filed August 4, 1897. Serial No. 647,082. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. MURRAY, of Rochester, in the county of Monroe and State of New York, have invented certain 5 new and useful Improvements in Desk Attachments; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of 10 this specification, and to the reference-numerals marked thereon.

My present invention has for its object to provide an improved manual-training table or bench particularly adapted as an attach-15 ment for ordinary school-desks whereby the ordinary classical course may be followed by a course in manual training without the necessity of having the pupils leave their seats. As the manual-training course involves the 20 use of woodworking-tools, the desk attachment should not only be adapted for holding the tools required, but contain the fixtures or appliances necessary for their proper use and be capable of ready attachment to the desk 25 without marring or injuring it.

To these and other ends the invention consists in the improved construction hereinafter described, the novel features being pointed out in the claims at the end of the specification.

In the drawings, Figure 1 is a perspective view of a desk attachment constructed in accordance with my invention; Fig. 2, a transverse sectional view, and Fig. 3 a cross-sectional view on the line x x of Fig. 1.

Similar reference-numerals indicate simi-

lar parts.

The bench or desk attachment 1 is adapted to be applied to the usual form of schooldesks, having the top 2 slightly inclined. 40 While it is not necessary, I desire to have the | pecially when working upon the end of the bench level or in nearly a horizontal plane, and for this purpose I provide the two wedgeshaped or tapered supporting-pieces 34, secured upon the under side and at the ends of 45 the board by screws or other suitable means. The attachment is rigidly secured by clamping the desk between the downwardly-projecting strip 5 upon one end and the clampingpiece 6 upon the other, operated upon by the 50 thumb-nut 7 and the bolt 8, extending through the strip 3.

The rear upper portion of the bench is slightly depressed for about one-quarter its width and is fitted with a rail or back 9, which extends across the rear and around the sides 55 to the end of the depressed portion. Within this inclosure are contained a number of woodworking-tools suitable for work on light patterns or cabinet-making, all neatly fitted and held in their respective places by small 60 wooden stops or cleats 9^{\times} .

A drawer 10 is arranged upon the under side of the bench, sliding upon cleats 10[×] and adapted to hold drawing instruments, sketches, and the like. Suitable holding- 65 brackets 11 are also provided upon the under side, in which may be slid a T-square 12, which may be used upon the bench in making drawings or in laying out the work, said T-square being held from accidental dis- 70

placement by a friction-spring 13.

Mounted upon the right-hand end of the bench is a shooting-board for holding work while being planed, consisting of a stop 14, secured at right angles to the edge 15 of the 75 bench, a guide 16, attached to the top of the stop, extending to the front of the bench, with its face in line with the edge 15 to support the upper edge of the plane, and a guide or way 16' to support the plane upon its side is 80 secured with its face at right angles to the edge of the bench, the stop, and the guide 16, and having its face slightly lower than the surface of the bench. Great difficulty has been experienced in the use of shooting-85 boards in the hands of unskilled persons, from the fact that the plane is liable to be tilted slightly, and as the knife or cutter passes from the work the upper corner of the stop is cut into. The second time it is used, es- 90 material, as in this instance the cut is made directly across the grain, the farther edge, not being properly supported, is torn off or broken away as the cutter passes across it. 95 By means of the construction above described such injury to the work and stop is prevented. by holding the plane perpendicular at all times, and such tilting and injury to the stop are prevented, as before described. Upon the 100 opposite end of the bench is arranged a vertically-adjustable work-stop 17, operating in

an aperture in the bench-top and adapted to be elevated more or less by a wedge 18 engaging its lower end. A pin or screw 19, projecting through a slot in the cleat 20, having 5 the flange 21, which is rigidly secured to the strip 3, serves as a means for operating the wedge, as well as to limit its movement and prevent the upper edge of the stop 17 from dropping below the top of the bench. The 10 accidental displacement or withdrawal is pre-

vented by the tapered sides of the stop and aperture, as shown.

By the use of my device as herein described the course in manual training and the ele-15 mentary use of common tools may be easily taught and such a course introduced into the public schools of a city at a very slight expense.

I claim as my invention—

1. In a desk attachment or bench, the combination with the tapered supporting-pieces, clamping devices extending below the latter and adapted to engage a desk-top, of a shooting-board upon one end of the bench consist-25 ing of a stop secured at right angles to the edge of the latter, a plane-guide at the end of the bench below the level of the top thereof, and an upper plane-guide extending over

30 scribed. 2. A bench top or attachment for school-

the edge of the bench substantially as de-

desks having the tapered supporting-pieces whereby the bench is held in a horizontal plane when applied to a slanting desk-top, a shooting-board upon one end and a work-stop 35 17, arranged upon the other end in close proximity to the edge, and a wedge 18 adapted to engage with the lower end of said stop and adapted to project it through an aperture in the desk-top.

3. In a desk attachment, for the purpose described, the combination with the top having the tapered supporting-pieces 3 and 4 at the sides, of the stationary strip 5 on one side, and a clamping-piece 6 on the other, and the 45 bolt for operating the latter, both said strip and piece 6 extending below the pieces 3 and 4 and operating to clamp the attachment to

a desk, substantially as described.

4. The combination with the bench having 50 the vertical aperture and means for securing the bench removably to a desk-top, of the vertically - movable work - stop, operating through the aperture, and the wedge sliding beneath the bench and engaging the lower 55 end of said stop for adjusting it vertically, substantially as described.

WILLIAM W. MURRAY.

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Witnesses:

F. F. CHURCH, G. W. RICH.