

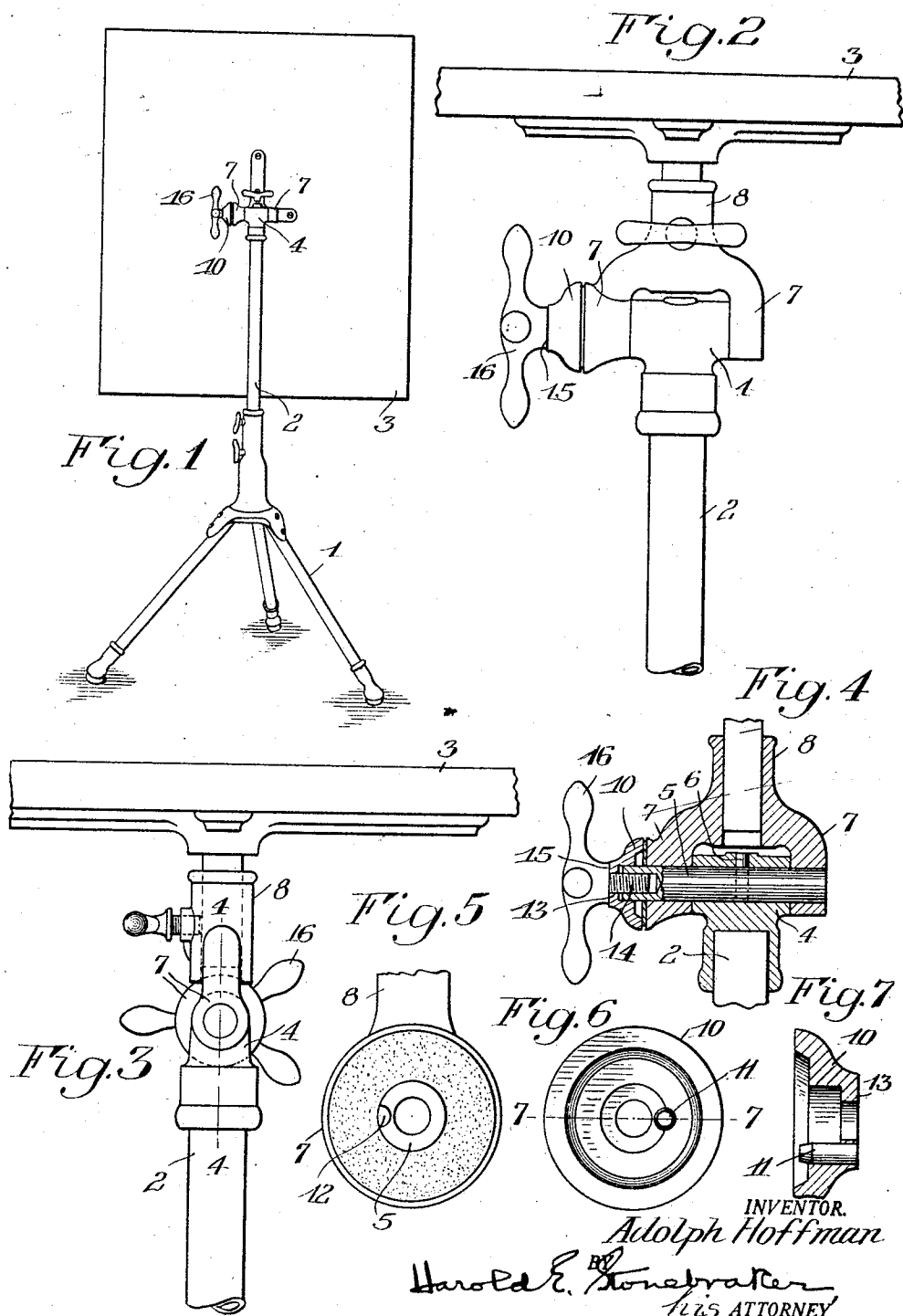
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A. HOFFMAN

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ADJUSTABLE SUPPORTING MECHANISM FOR DRAWING BOARDS

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ADJUSTABLE SUPPORTING MECHANISM FOR DRAWING BOARDS.

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To all whom it may concern:

Be it known that I, ADOLPH HOFFMAN, a citizen of the United States of America, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Adjustable Supporting Mechanism for Drawing Boards, of which the following is a specification.

My invention relates to a supporting mechanism for drawing boards, and has for its object to afford a construction by which a board can be readily adjusted to different positions or angles with reference to the horizontal, and easily clamped in such adjusted position.

A more particular object of the invention is to provide a simple and practicable arrangement of parts that can be manufactured economically, will stand wear, and at the same time insure a positive clamping of the board in such a way that slipping of the board from its adjusted position is not possible after it is once properly clamped.

To these ends, the invention comprises the structure that will appear more clearly from the following description, when read in conjunction with the accompanying drawings, the novel features being pointed out in the claims following the description.

In the drawing:

Figure 1 is a side elevation of a drawing board and supporting stand, including a preferred embodiment of my invention, the board being in upright position;

Figure 2 is an enlarged side elevation, with parts broken away, and showing the board in horizontal position;

Figure 3 is an end elevation of the parts illustrated in Figure 2;

Figure 4 is a sectional view on line 4—4 of Figure 3;

Figure 5 is an end elevation of the yoke and post, with the clamping collar and locking bolt removed;

Figure 6 is an end elevation of the clamping collar, and

Figure 7 is a sectional view on line 7—7 of Figure 6.

Referring more particularly to the drawings, in which like reference numerals throughout the several views indicate the same parts, 1 designates a tripod of conventional form, in which is arranged a vertically adjustable standard 2 upon which is adjustably mounted the drawing board 3, and

the features of my invention have to do with the mechanism for clamping the board in adjusted relation upon the standard 2.

To accomplish this, I provide a horizontally disposed sleeve 4 at the upper end of the standard 2, said sleeve affording fixed shoulders at its opposite ends, and 5 is a post that is keyed in said sleeve in any suitable way, as by a pin 6 driven through the sleeve and post and held frictionally therein. The post 5 has its ends protruding beyond the ends of the sleeve 4, to afford bearings for the arms 7 of a yoke 8, which carries the drawing board 3. The inner faces of the arms 7 contact with the shoulders formed by the ends of the sleeve 4, the yoke being rotatable on the post 5 for adjustment to different angles to the horizontal.

In order to clamp the yoke in any adjusted position, I employ a clamping collar that is held against rotation on the post 5 but slidable thereon and adapted to be brought into clamped relation with one of the arms 7. To this end, I employ a clamping collar 10 which carries a pin 11 engaging an opening or recess 12 in the post 5 so as to prevent rotation of the collar 10 upon the post, while permitting its slidable movement thereon. The clamping collar 10 is forced tightly against the adjacent arm 7 of the yoke, holding the latter clamped between the shoulder at one end of the sleeve 4 and the clamping collar 10.

A preferable arrangement for accomplishing this includes a flange 13 at the outer end of the clamping collar 10 and arranged to overlie the end of the post 5, see Figure 4. A locking member or bolt is provided which comprises a threaded stem 14 engaging a correspondingly threaded opening in the end of the post 5, a shoulder 15 which contacts with the outer face of the flange 13 on clamping collar 10, and a handle or turning portion 16 by which the bolt is operated.

To adjust the board, the handle 16 is turned to loosen the clamping collar 10, and the board can then be swung in a vertical plane to any desired position, whereupon the handle 16 is turned in the opposite direction to force the clamping collar 10 tightly against the adjacent arm 7 of the yoke which carries the board. This arm of the yoke is held between the shoulder on one end of the sleeve 4 and the clamping collar 10, and since the clamping collar 10,

post 5 and sleeve 4 are all fixed against any rotative movement, the yoke is tightly secured by simply turning the handle 16, and after being once adjusted, there is practically no chance of the board supporting yoke coming loose or slipping.

I claim:

1. The combination with a post having a shoulder fixed thereon, of a yoke journalled on the post in engagement with said shoulder, a collar held against rotation on the post and slidable therealong to engage the outer face of the yoke, and a locking member having threaded engagement with the post and acting to force the collar and yoke toward said shoulder.

2. The combination with a post, of a sleeve fixedly arranged thereon, a yoke journalled on the post and engaging the ends of the sleeve, a collar held against rotation on the post and slidable therealong to engage one arm of the yoke, and a locking member having threaded engagement with the post and acting to move the collar into clamping engagement with the adjacent arm of the yoke.

3. The combination with a standard including a horizontally arranged sleeve at its upper end, of a post fixed in said sleeve with its ends protruding therebeyond, a yoke journalled upon said post with arms in engagement with the ends of said sleeve, a collar held against rotation on the post and slidable therealong toward one arm of the yoke, and a locking member having threaded engagement with the post and acting to force the collar into clamping relation with the adjacent arm of the yoke.

4. In an adjustable supporting mechanism for a drawing board, the combination with a standard having a horizontally disposed sleeve at its upper end, of a post fixed in said sleeve with its ends protruding therebeyond, a board support including a yoke having arms journalled on said post and in engagement with the ends of said sleeve, a collar held against rotation upon the post and slidable therealong to engage one of the arms of the yoke, and a locking bolt having threaded engagement with an opening in the end of the post and acting to force the collar into clamping relation with the adjacent arm of the yoke.

5. In an adjustable supporting mechanism for a drawing board, the combination with a standard having a horizontally disposed sleeve at its upper end and a post fixed in said sleeve with its ends protruding therebeyond, of a board support including a yoke with arms journalled on said post and in engagement with the ends of said sleeve, a clamping collar slidable on one end of said post and carrying a pin which engages a recess in the post to prevent rotation of the collar, said collar including a flange overlying the end of the post, and a locking bolt including a threaded stem engaging a threaded opening in the end of the post and a shoulder engaging said flange on the collar and acting to move the latter into clamping relation with the adjacent arm of the yoke.

In witness whereof, I have hereunto signed my name.

ADOLPH HOFFMAN.