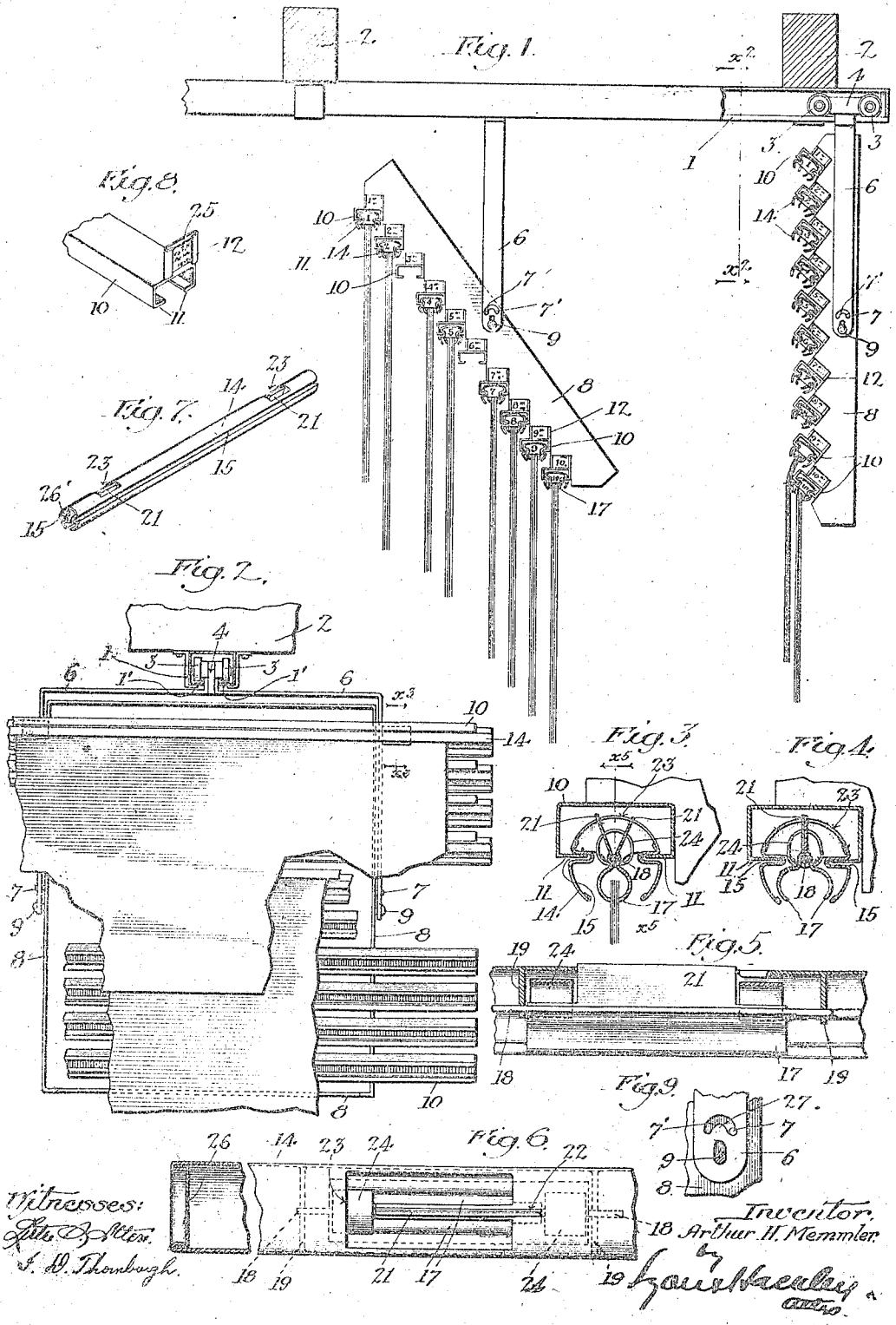
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A. H. MEMMLER.

DRAWING FILE.

APPLICATION FILED MAY 8, 1911. RENEWED NOV. 14, 1914.

1,135,310. Patented Apr. 13, 1915.



Witnesses:
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UNITED STATES PATENT OFFICE.

ARTHUR H. MEMMLER, OF SAN GABRIEL, CALIFORNIA.

DRAWING-FILE.

1,135,310. Specification of Letters Patent. Patented Apr. 13, 1915.

Application filed May 8, 1911, Serial No. 625,873. Renewed November 14, 1914. Serial No. 872,235.

To all whom it may concern:

Be it known that I, ARTHUR H. MEMMLER, a citizen of the United States, residing at San Gabriel, in the county of Los Angeles and State of California, have invented a new and useful Drawing-File, of which the following is a specification.

This invention relates to means for filing or storing drawings, tracings, prints and other sheet articles, and the main object of the invention is to provide means whereby a large number of such articles may be conveniently filed in limited compass.

Another object of the invention is to provide a file in which the drawings, etc., are readily and immediately accessible for inspection and removal, either individually or in sets.

A further object of the invention is to provide a sectional file which may be added to indefinitely, and is capable of classification in any desired order.

Another object of the invention is to provide a file in which the sheets are always supported in flat, or unrolled and unfolded condition, and in which the sheets may be held close to keep out dust, and may be quickly separated for inspection and removal.

Another object of the invention is to reduce to a minimum the cost of manufacture of the file.

Other objects of the invention will appear hereinafter.

The accompanying drawings illustrate the invention, and referring thereto:

Figure 1 is an end elevation of the file showing one of the drawing carriers in open condition and another in closed condition. Fig. 2 is a vertical section on line x^2—x^2 in Fig. 1. Fig. 3 is a section on line x^3—x^3 in Fig. 2, showing the drawing clamp in position. Fig. 4 is a view similar to Fig. 3, showing the drawing clamp in open position. Fig. 5 is a section on line x^5—x^5 in Fig. 3. Fig. 6 is a plan of one of the holders, showing the clamp means. Fig. 7 is a perspective of one of the holders. Fig. 8 is a perspective of a portion of one of the guides for the drawing holders, showing the indicating means thereon. Fig. 9 is an end view of the pivotal support for the carrier frame with the pivot in section.

The file comprises one or more rails or tracks 1, carriers mounted to travel on said tracks and drawing holders removably supported on said rails. As many of the tracks 1 may be provided as may be desired according to the requirements, one track being here shown and forming a unit which may be multiplied as often as desired, a description of such unit serving for the complete file. On each track any number of carriers may be provided and carriers may be added to each track from time to time until the capacity of the track is exhausted. The track 1 is mounted on a suitable support, for example, beams 2, and may be formed of channel shape with inwardly extending flanges 1′ at the lower edges of the channel to engage and support the wheels 3 of the carriage trolleys. Each carriage comprises a trolley formed with a frame 4 on which are journaled wheels 3 adapted to run on the flanges 1′ aforesaid and arms 6 extending outwardly and then downwardly from said frame 4 to form a bail-shaped hanger, a carrier frame 8 being pivotally mounted at 9 on the ends of this bail and provided with sheaths or guides 10 for supporting the drawing holders, said sheaths or guides being arranged at different heights on the carrier frame, so that when the frame hangs in inclined position the drawings hung from the drawing holders will extend side by side. A pin 7 in frame 8 engages in a slot 7′ in hanger arm 6 to limit the angular movement of said frame. The frame 8 is preferably made of sheet metal for the sake of lightness and cheapness and the sheaths or guides 10 may also be made of sheet metal in channel shape, said guides having inwardly extending flanges 11 at their lower edges to receive and support the drawing holders. Card holders 12 may be formed on sheaths or guides 10, to receive cards or number tags 25.

The drawing holders 14 may be formed of sheet metal bent in cylindrical shape, open at the bottom to form a channel, the sides of the holder being formed with grooves 15 to receive and engage the inwardly extending flanges 11 of the tracks 10. Clamping devices are provided in the said holders for engaging the drawing, said clamping devices consisting, for example, as shown in Figs. 3 to 6, of two jaw members 17 hinged together on a shaft 18 extending longitudinally within the holder, said shaft being slidably mounted in bearings 19 within the holder. Said jaw members 17 extend downwardly from shaft 18 and are curved

to extend around and embrace the edges of the drawing, and said jaws are provided with handle portions or arms 21 extending upwardly, so as to be engageable within a slot 22 in the top of the cylindrical holder, the holder top being cut away, as shown at 23, in advance of this slot to enable the fingers to be inserted at each side of the upper arms of the clamps, so as to grip the said arms for opening the clamps. A bow-spring 24 embracing the clamp jaws tends to press the said jaws together to grip the paper. The ends of the tube or cylindrical holder 14 may be closed by disks 26, fastened, for example, by seaming the wall of the tube over the disk. These disks may be marked or numbered on the outside, in correspondence with the marks on members 25 in the sheaths or guides 10, as indicated at 26'.

The file is used as follows: Assuming that one of the holders 14 is removed from the carrier frame 8, the drawings are inserted in the holder by pressing on the handle portions 21 for the jaws 17, so as to separate the jaws, and then sliding said handle portions into the slots 22 in the holder, the walls of said slots then holding said handle portions close together and holding the jaws apart. One or more drawings, according to the capacity of the clamps and the requirements of the user are then inserted within the opening at the bottom of the cylindrical-shaped holder 14 and within the open jaws 17 and the handle portions of the jaws 17 are then drawn out of the slots 22 in the holders, allowing the springs 24 to close the jaws forcibly on the drawings and grip the drawings in the holder. The holder may then be slid endwise into the sheaths or guides 10 on one of the carrier frames 8, the card 25 in the corresponding card holder 12 and the numbered tube end, indicating the classification of the drawings in that holder. The slot 7' in the hanger 6 is formed with a vise or elevation 27 over which the pin 7 passes as the carrier frame 8 swings to one side or the other, thus retaining the frame by gravity, in either folded or vertical position, shown at the right of Fig. 1, or in opened or inclined position shown at the left of said figure. Assuming that a number of carrier frames have been loaded in this manner, they may be stacked in close order by pushing their carriages along the tracks 1 until the frames and the drawings therein come in contact, the drawings hanging in vertical position, except at their upper ends where they bend over the sides of the next lower tracks, sheaths or guides on the carrier frame. When any of the drawings are to be inspected or removed, the person using the file will push the carriage containing the desired drawing or sets of drawings, located by means of the indicating card, until it is removed from the adjoining carriages and the swinging carrier frame 8 is then raised slightly to lift the pin 7 clear of the run 27, and the frame then falls by gravity to inclined position shown at the left of Fig. 1, the several sets of drawings supported by the respective holders on the carrier frame then hanging freely or separate from one another so that they may be inspected without removing them entirely from the carrier frame. If it is desired to remove the drawings, the corresponding holder will be slid out from the guide 10 thereof and the set or bunch of drawings in the said holder may then be rolled up on the said cylindrical holder forming a base for a convenient package if same is to be carried about. Any one or more of the drawings in said set can be removed by loosening one or both of the clamps. Thus, if it is desired to remove any one of the drawings while retaining the others in the holders, one of the clamps will be opened and slid endwise to hold it open and the other clamp left in closed position so as to retain the bunch of drawings in place. The drawing desired is then pulled down on the side toward the opened clamp and said clamp is then closed and the other clamp opened and the drawing then withdrawn bodily from the set, the second clamp being then closed leaving the set in position in the holder.

What I claim is:

1. A file for drawings, etc., comprising a track, carriages mounted to travel on said track, carrier frames pivotally mounted on said carriages to swing to vertical or inclined positions, each of said carrier frames being provided with a series of drawing holding devices disposed at different heights thereon.

2. In a file for drawings, etc., the combination of a track, a trolley traveling on said track, a carriage frame connected to said trolley and having depending arms, a carrier frame pivotally mounted on said depending arms and having vertically extending side bars and a plurality of drawing holding devices at different heights on said side bars.

3. In a file for drawings, a hanger, a support therefor, a carrier frame mounted to swing on said hanger, means for limiting the swinging movement of the carrier frame and drawing holder means mounted on the carrier frame.

4. A file for drawings comprising a track a trolley traveling on said track, a carrier frame supported by said trolley and having vertically extending side bars and drawing holding devices arranged at different heights on said side bars.

5. In a file for drawings comprising a track, a trolley traveling on said track, a carriage frame connected to said trolley and

having depending arms, a rectangular carrier frame having vertically extending side bars pivotally connected to said depending arms of the carriage frame and a plurality of drawing holding devices arranged at different heights on said side bars of the carriage frame.

6. In a file for drawings, the combination with a channel member constituting supporting and guiding means and having inturned flanges, of a cylindrical drawing holder having grooves in its side for engaging said flanges.

In testimony whereof, I have hereunto set my hand at Los Angeles, California this 28 day of April, 1911.

ARTHUR H. MEMMLER.

In presence of—
ARTHUR P. KNIGHT,
NORA G. RUSSELL.