

(No Model.)

A. G. WEISSENBORN.
VARNISHING FRAME OR HOLDER.

No. 482,664.

Patented Sept. 13, 1892.

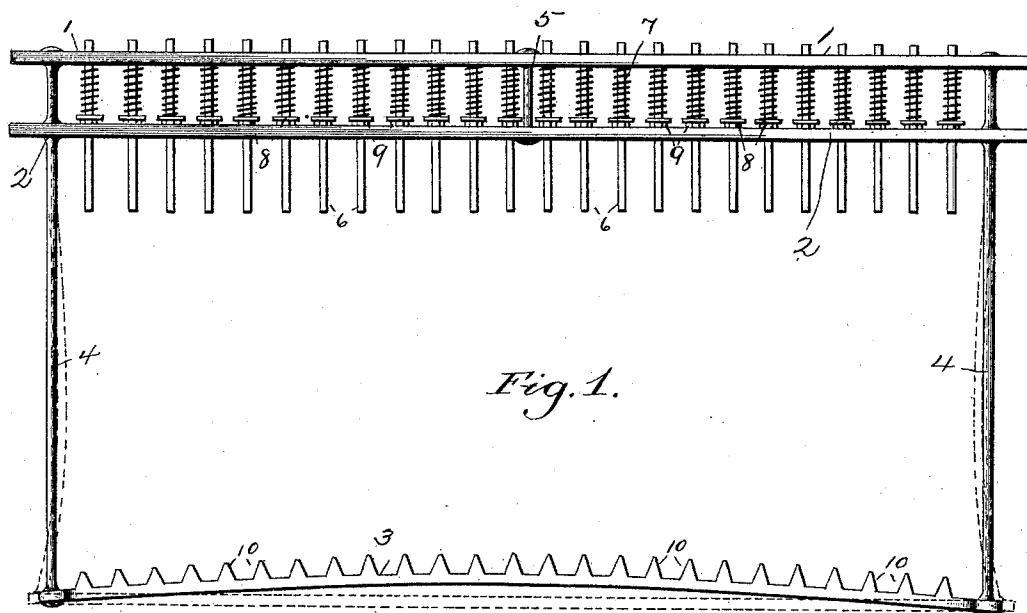
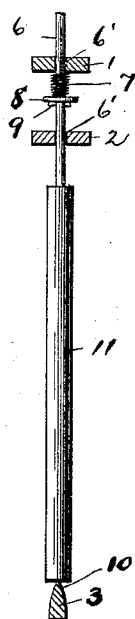


Fig. 2.



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UNITED STATES PATENT OFFICE.

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VARNISHING FRAME OR HOLDER.

SPECIFICATION forming part of Letters Patent No. 482,664, dated September 13, 1892.

Application filed March 23, 1892. Serial No. 426,157. (No model.)

To all whom it may concern:

Be it known that I, ALBERT GUSTAVUS WEISSENBOEN, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Varnishing Frames or Holders, of which the following is a specification.

This invention has reference to improvements in varnishing frames or holders for pencils, penholders, and other like articles to be held in the frame during the operation of varnishing.

It has heretofore been attempted to varnish lead-pencils by dipping them in varnish when held near their ends in clamps which embraced the sides of the pencils near those ends. By this practice a portion of the lead-pencil at each end was not covered with varnish, or if partly covered with varnish was unsightly and unfit to be placed on the market. It was therefore necessary after varnishing to cut off the portions of the ends which had been engaged by the clamps, thus causing considerable trouble and great waste. In addition thereto the varnish accumulating at the upper clamps would when the frame was withdrawn from the varnish flow down upon the pencil, causing streaks and ridges of varnish upon the body of the pencil, which rendered the article unmarketable.

I have found that in the practical application of the process of varnishing pencils by dipping in order to produce a smooth and even varnish finish and in order to avoid waste it is necessary to hold the pencils while the same are being dipped at their terminal surfaces only, and thereby avoid the necessity of cutting off portions of the finished pencil, the marring of the varnished surface, and the accumulation of varnish near the points where the pencils are held. With a view of realizing this result it is the object of the present invention to provide a holder for pencils, penholders, and the like, (all of which will be hereinafter included in the generic term "pencil,") which holder will engage the pencils at the end surfaces only to the exclusion of any sensible part of the sides.

A holder constructed in accordance with my invention is perfectly adapted for var-

nishing pencils by dipping, and, while it may be variously constructed to accomplish the result aimed at, it is conveniently made of a frame provided with a number of pointed lugs and an equal number of spring-actuated pins, one opposite each lug. The distance between the tips of the lugs and the ends of the pins is somewhat smaller than the length of the article to be held between them, so that when such article is introduced the spring is under tension, and the said article is thus firmly clamped, ready to be dipped in the varnish in any convenient or improved manner.

In the accompanying drawings, forming part of this specification, there is shown in Figure 1 an elevation, partly in section, of a holder constructed in accordance with the present invention, and in Fig. 2 a view of a section on line *xx* of Fig. 1 with an object (a pencil) clamped in the frame.

Like numerals of reference indicate like parts.

The varnishing-frame is composed of three parallel bars 1 2 3, arranged in the same plane. Two of these bars, 1 and 2, are a moderate distance apart, while the third bar 3 is at a distance from the bar 2 which is somewhat greater than the length of the objects to be clamped in the frame. These three bars are spaced and held in their relative positions by side rods 4 4, to which they are fastened either by passing the side rods through holes in the horizontal bars and upsetting the former, as shown in the drawings, or in any other suitable manner. For the purpose of securing permanent parallelism between the bars 1 2 one or more stiffening-rods 5 between the said bars may be used. Each bar 1 2 is provided between the side rods 4 4 with a series of holes or perforations 6', (see Fig. 2,) the holes in one bar matching those in the other bar, and through these holes extend pins 6, which latter may be simple pieces of wire of suitable size and length and each of which constitutes the movable jaw or follower of a clamp. Each pin 6 between the bars 1 2 is surrounded by a helical spring 7, abutting at one end against the bar 1 and at the other end against a washer 8 on the rod, which washer in turn rests against a key 9, extending through the said rod 6 at a point about midway of the

length of the latter and projecting a short distance on each side thereof. The key 9, bearing upon the bar 2, limits the travel of the follower-pin 6 in one direction, and, together
 5 with the washer 8 and spring 7, limits the travel of the follower-pin in the other direction. The tendency of the spring 7 is to maintain the follower with the key 9 against the bar 2—that is, in the position shown in Fig.

10 1. The bar 3 is provided with a series of bluntly-pointed lugs 10, equal in number to and each opposite or matching a follower 6, the construction being such that a pencil or other object may be engaged at one end by a
 15 lug 10 and at the other end by the corresponding end of a follower 6. It will be understood that the distance between the point of a lug 10 and the corresponding follower 6 is normally less than the length of the article to be clamped and that the spring 7 must be compressed, as shown in Fig. 2, when a pencil 11 or other object is placed in the clamp. The point of each lug is quite blunt and the springs 7 are light, so that while the pencil is
 25 firmly held no injury is done thereto. The ends of the followers 6 which engage the terminal faces of the article are preferably made smaller than these terminal faces, as shown, and similarly the points of the lugs 10 are also made smaller than those terminal faces. In this manner the accumulation of varnish at or about the ends of the articles is avoided.

It is evident that the combined action of the spring 7 when the frame is filled with
 35 pencils will tend to bind the bar 3 away from the followers 6, since the bar is supported at the ends only, and so loosen the pencils held in the middle portion of the frame. In order to counteract this tendency of the spring 7, I
 40 may either make the bar 3 so heavy and stiff as to be practically inflexible or I may bend the bar 3 toward the followers. The bending of the bar toward the followers is the preferable mode of counteracting the tendency of the spring 7, and this form I have illustrated in Fig. 1, though somewhat exaggerated for the sake of clearness. The bowed bar 3 may be made quite light, and when the pencils are placed in the frame this bar will be straightened, as shown in dotted lines, Fig. 1, the
 45 straightening of the bar being made possible by the elasticity of the side rods 4, which latter will of course be bent when the said bar 3 is straightened.

50 The pencils may be placed in the frame by putting one end of a pencil against the end of a follower 6, then pushing the pencil upward to compress the spring 7, and finally placing the other end of the pencil on the corresponding lug 10. The pencil is then released and is found firmly held by end pressure between the said lug and follower. This operation is continued until the frame is filled, and the pencils are then ready for dipping in
 55 the varnishes.

The frame may be supported in any desired manner during the operation of dipping;

but a convenient way is to insert a number of them in a suitable holder and then lowering the frames in the varnish, preferably by
 70 machinery to prevent the tremblings which cannot be avoided in hand manipulation. In dipping, the frame is lowered into the varnish until the pencils are immersed and is then withdrawn and the frame, with the pencils
 75 therein, is put aside to allow the pencils to dry, the operations of dipping and drying being performed as often as necessary. The pencils are either left in the frame until the several coats of varnish are applied and dried
 80 or they may be removed at any stage of the varnishing for receiving the maker's stamp or for other purposes and can be quickly replaced in the frame. The pencils being held at the end surfaces only, no accumulation of
 85 varnish at these points can occur, and consequently the smooth and even surface of the finished pencil is unbroken and unmarred.

It will be seen that my improved varnishing-frame, while it contains a series of independent individual spring-clamps, each for
 90 holding a single pencil, as a whole also acts as a spring-clamp for holding a number of pencils. The fundamental idea of my invention being to hold pencils or other like
 95 articles by end pressure at their terminal surfaces to the exclusion of any portions of the sides, it will be understood that I am not absolutely confined to the details of construction shown and described, since the same may
 100 be variously changed without departing from the principle of my invention.

Having thus fully described my invention, I claim and desire to secure by Letters Patent—

105 1. A varnishing frame or holder for pencils and other like articles, provided with means for engaging by end pressure the terminals only of the pencil or other article, substantially as described.

110 2. A varnishing frame or holder for pencils and other like articles, containing a number of individual clamps for engaging by end pressure the terminals of the pencils to the exclusion of any portion of the sides, substantially as described.

115 3. A varnishing frame or holder provided with a series of clamps, each composed of a spring-actuated pin-follower and a blunt lug opposite to and matching said follower, substantially as described.

120 4. A varnishing frame or holder composed of two parallel bars, spring-actuated followers mounted therein, another bar provided with lugs equal in number to and matching
 125 the followers, and side rods connecting the last-named bar with the two parallel bars, substantially as described.

130 5. A holder for articles to be varnished, composed of a rigid guide with a series of elastically-supported pin-followers mounted therein and a frame connected with the rigid guide and provided with a bar having lugs in alignment with the pins, substantially as described.

6. A holder for articles to be varnished, composed of a rigid guide with a series of elastically-supported pins mounted therein and an elastic frame connected with the rigid guide and provided with an elastic bar having lugs in alignment with the pins, substantially as described.

7. A varnishing frame or holder for pencils and other like articles, provided with means for engaging by end pressure a portion only of the terminals and no portion of the sides of the pencil or other article, substantially as described.

8. A varnishing frame or holder for pencils and other like articles, containing a number of individual clamps for engaging by end pressure a portion only of the terminals of the pencils to the exclusion of any portion of the sides, substantially as described.

9. A varnishing frame or holder provided with a series of spring-actuated followers and a series of lugs or supports for the articles to be varnished equal in number to and matching the followers, the clamping-faces of the followers and lugs being smaller than the terminal faces of the articles, substantially as described.

10. A varnishing frame or holder provided with a series of clamps, each composed of a spring-actuated follower and a blunt lug op-

posite to and matching said follower, the clamping-faces of the followers and lugs being smaller than the terminal faces of the articles, substantially as described.

11. A varnishing frame or holder composed of two parallel bars, spring-actuated followers mounted therein, another bar provided with lugs equal in number to and matching the followers, the clamping-faces of the followers and lugs being smaller than the terminal faces of the articles to be held thereby, and side rods connecting the last-named bar with the two parallel bars, substantially as described.

12. A holder for articles to be varnished, composed of a rigid guide with a series of elastically-supported pin-followers mounted therein and a frame connected with the rigid guide and provided with a bar having lugs in alignment with the pins, the clamping-faces of the followers and lugs being smaller than the terminal faces of the articles to be held thereby, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT GUSTAVUS WEISSENBORN.

Witnesses:

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