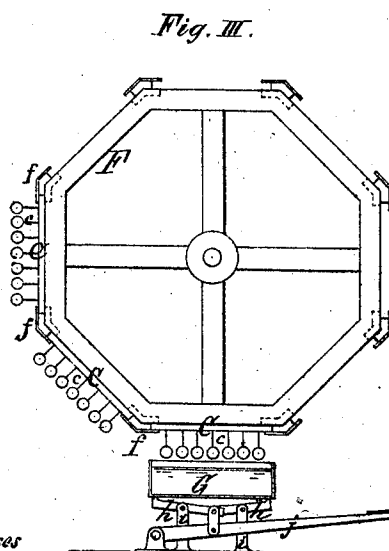
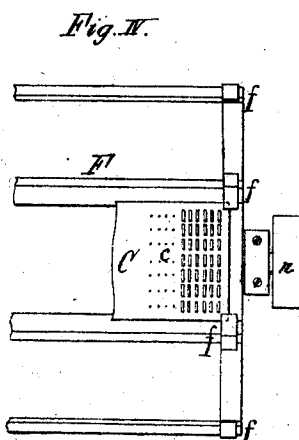
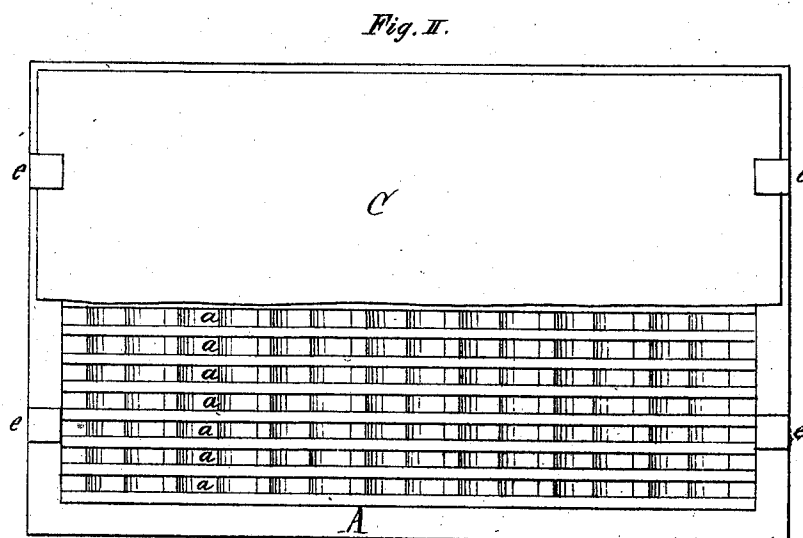
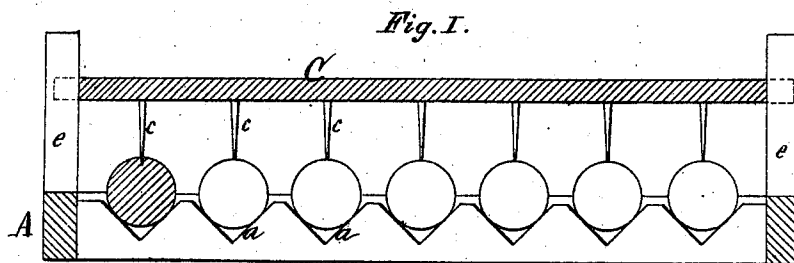


J. S. HYATT, J. W. HYATT & C. M. HYATT.
 Improvement in Apparatus for Enameling Checkers, &c.
 No. 128,729. Patented July 9, 1872.



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UNITED STATES PATENT OFFICE.

I. SMITH HYATT, JOHN W. HYATT, AND CHARLES M. HYATT, OF ALBANY,
NEW YORK, ASSIGNORS TO THE EMBOSsing COMPANY, OF SAME PLACE.

IMPROVEMENT IN APPARATUS FOR ENAMELING CHECKERS, &c.

Specification forming part of Letters Patent No. 128,729, dated July 9, 1872.

SPECIFICATION.

We, I. SMITH HYATT, JOHN W. HYATT, and CHARLES M. HYATT, all of the city and county of Albany, and State of New York, have invented certain Improvements in Apparatus for Enameling Checkers, Dominos, &c., of which the following is a specification.

Our invention relates to an apparatus by which checkers, dominos, and similar small blocks or pieces of wood can be readily painted or coated with enamel and dried with great convenience and facility without requiring the articles to be separately handled during the process or after the enamel has been applied thereto. The invention consists, first, in the combination of a rack or frame provided with suitable cells or pockets to receive the checkers or other articles to be enameled, and a frame or rack provided with projecting needles, arranged to correspond with the pockets in the former rack, so that by pressing the needle-frame down upon the rack containing the checkers the latter will be impaled, each, on the point of one of the needles, so as to adhere thereto and be removed with the needle-frame; second, of a revolving reel of polygonal shape combined with and adapted to receive the racks and impaled checkers, whereby the paint or enamel on the latter is prevented by the rotation of the reel from settling in drops, as would be the case if they were left stationary; third, in the combination, with such revolving-reel and checkers, of racks of a basin or other suitable receptacle for the enameling liquid, arranged beneath the reel, and provided with suitable mechanism for raising and lowering the same, so that by turning the reel so as to successively bring the racks of impaled checkers horizontally underneath the latter can be readily immersed in the liquid.

In the accompanying drawing, Figure I is a vertical section, showing the checker-holder and the needle-rack in the act of being forced down upon the former. Fig. II is a plan of Fig. I with a portion of the needle-frame broken away. Fig. III is an end elevation of the reel and the basin containing the enameling liquid. Fig. IV is a fragmentary plan view of the reel, showing one of the needle-frames in place thereon.

Like letters designate like parts in each of the figures.

A is a rectangular rack, constructed with recesses or pockets *a*, preferably of angular form, as shown, which adapts them to receive blocks of different sizes. C is a board or frame, corresponding in size with the rack A, and provided with projecting needles, *c*, arranged to correspond with the pockets or recesses in the rack A. The pockets in the rack A being filled with the blocks prepared for enameling, the needle-frame C is placed over the rack with the needles pointed downward and resting with their points on the summit of the checker-block, as shown in Fig. I. The needle-frame being retained against lateral displacement by suitable guides or standards, *e*, is forced down upon the checkers by a press or any other suitable means with sufficient force to cause the needles to penetrate the blocks, so that when the needle-frame is removed the blocks will adhere to the needles. F is a horizontal reel, provided with polygonal heads of such size that each side or face of the reel will nearly correspond in size with one of the needle-frames, which, when filled with impaled blocks, are slid in place between suitable guides, *f*, at the angles of the reel with the needles and blocks projecting outward, as clearly shown in Figs. III and IV. The shaft of the reel is supported in bearings in any usual manner, and is provided at its end with a pulley, *n*, or other suitable means, by which motion may be imparted to the reel. G is a rectangular pan or basin, arranged underneath the reel, and resting upon any suitable adjustable support. As shown in the drawing, this support consists of levers, *h h* having their fulcrums in the tops of standards *i i*, with their inner ends united by a slotted joint, so as to permit of the necessary movement of the levers. These levers, from their point of junction, are connected by suitable links or straps to a foot-lever, *j*, underneath. By pressing down on this foot-lever the inner ends of the levers *h* will be pulled downward, while the outer ends thereof, made sufficiently broad to properly support the basin, will be forced upward, and the pan or basin G elevated accordingly.

The reel being filled with needle-frames and blocks, as above described, and the pan G supplied with the required paint, varnish, or enameling liquid, the reel is adjusted so that one of the frames will be horizontally underneath, as shown in Fig. III. By depressing the foot-lever *j* the pan G is elevated, and the impaled blocks immersed in the liquid contained therein. The pan is now lowered, and the blocks allowed to drain for a moment, when the reel is turned so as to bring its next face and the needle-rack secured thereto underneath, when the enameling process is repeated, and so on until all of the blocks have been thus treated. The reel is now set slowly in motion, by which the drying of the blocks is facilitated, while, at the same time, the paint or enamel is prevented from settling and collecting in drops, thereby insuring a uniform distribution of the enamel over the surface of the blocks and a rapid drying of the same.

If preferred, the checkers impaled on the needle-frames may be dipped by hand into the varnish or enameling liquid before being adjusted on the reel, thereby dispensing with the adjustable basin G.

It is manifest that our improved apparatus may be employed for treating blocks of various

shapes and sizes, by simply making the pockets to correspond therewith.

By means of our improved apparatus it is obvious that small blocks, such as checkers, dominoes, &c., are made of, can be coated with paint, varnish, or enamel with great rapidity and in the most perfect manner without their surfaces being marred or disfigured by handling, or by one block coming in contact with another before the enamel becomes dry, thereby effecting a great saving in the cost of manufacturing articles of the above character.

We claim as our invention—

1. The combination of the receiving-rack A *a* and the needle-frame C *c*, substantially as and for the purpose hereinbefore set forth.

2. The combination of the needle-frame C *c* of the reel F, adapted to receive the former, substantially as hereinbefore set forth.

3. The combination, with the reel F and needle-frame C *c*, of the vertically-adjustable receptacle G, for the paint or other enameling liquid, substantially as hereinbefore set forth.

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Witnesses:

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