May 19, 1931. C. E. ERICSON 1,805,516

DIAMOND FLOOR POLISHER

Filed Oct. 12, 1929

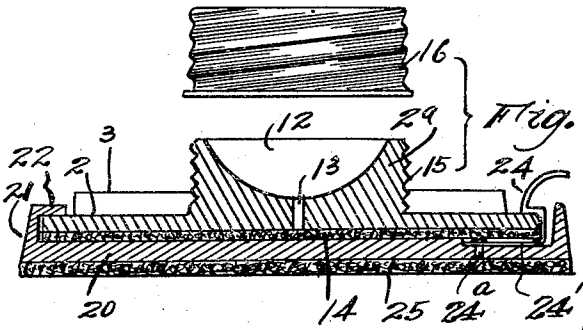



Fig. 3.

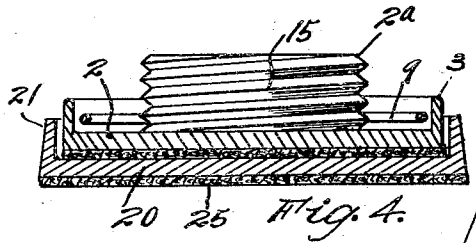



Fig. 4.

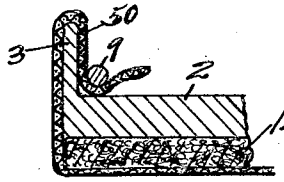



Fig. 5.

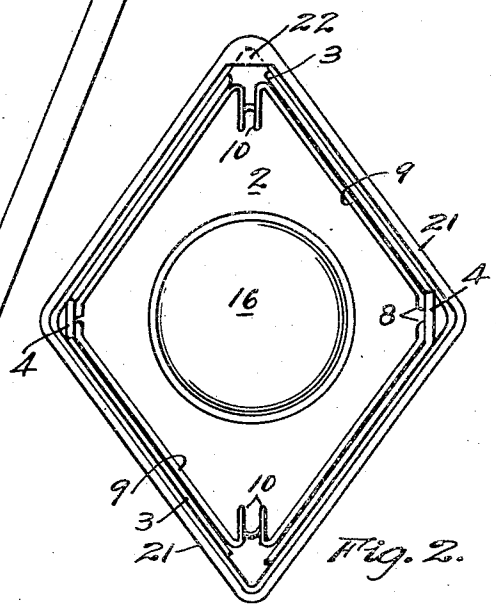



Fig. 2.




Fig. 1.

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# UNITED STATES PATENT OFFICE

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## DIAMOND FLOOR POLISHER

Application filed October 12, 1929. Serial No. 399,234.

This invention relates to floor waxing and polishing apparatus of the hand or manual power type.

It is an object of this invention to provide a combined waxing iron and polishing iron whereby the former can be used alone to spread wax and is then applicable to the latter as a weight to facilitate polishing action by the latter. There is an additional object residing in providing the waxing iron with a handle device which serves also as the means for propelling the associated polisher.

A further object is to provide a waxing iron with a novel means for expressing wax through its effective face from time to time.

Also it is an object to provide a simple, reliable, durable and easily operative means for clinching an applied, removable smoothing out cloth to the face of the waxer.

While the principal body elements of the apparatus are herein referred to as "irons" it is to be understood that they are not to be limited to such metal as essential; the word being only nomial in use.

Other objects, advantages and features, and construction, combination and details will be made manifest in the ensuing description of the herewith illustrative embodiment; it being understood that modifications, variations and adaptations may be resorted to within the scope, principle and spirit of the invention as it is hereinafter more directly claimed and consisting of the disclosure and its substantial equivalents.

Figure 1 is a perspective of the polishing apparatus.

Figure 2 is a top plan of the irons.

Figure 3 is a longitudinal, vertical section of the iron parts.

Figure 4 is a transverse section.

Figure 5 is a sectional detail of the wax-cloth clinch device.

The waxing device includes a flat, diamond-shaped iron-body 2 of such size and thickness as to be effective to smooth out a coating of floor wax. The top of the iron 2 has side walls or beads 3 which converge toward and end near the lips of the diamond body of the iron 2.

On the minor axis of the iron are a pair of vertical bearing lugs 4 in which are mounted the trunnions 5 of a yoke 6 carrying a handle pole 7.

In the lugs 4 are also pivoted trunnions 8 of a pair of oppositely directed V-shaped, clinching frames 9—9 each having convergent side arms joined by spring coils 10—10 whose function is to press the arms against the inner faces of the beads 3. Thus when a cloth 50 is drawn across the bottom face of the iron 2 and tucked over the beads 3, while the frames 9 are elevated, then the arms of the frames will clinch down on and bind the cloth to the beads when the frames are depressed to effective position.

Another feature is the central boss part $2^a$, of the body 2, which has a well 12 with a hole 13 to the bottom of the iron 2, which latter preferably has a felt face 14 over the hole 13.

The boss $2^a$ is externally threaded at 15 to receive a cap 16 whose flange is threaded onto the boss $2^a$. When the cap is to be applied it and the well are filled with soft wax of suitable character, and then as the cap is screwed down, from time to time, the wax is expressed through the hole 13 to the felt pad 14.

Thus waxed iron 2 is pushed to and fro on the floor by its handle until the excess wax is smoothed on in a thin layer.

The iron 2 is now placed on top of a diamond-shaped floor polishing iron 20 having a rim wall 21 one end of which has an inner overhanging lip 22 under which a point of the diamond iron 2 may be thrust and interlocked as the heel thereof is pressed under a snap spring 24 at the heel of the polisher 20, thus firmly attaching the handle-carrying iron 2 to the polishing iron 20; this having a felt facing 25. The snap spring 24 has a foot part 24′ countersunk in the iron 20 and is suitably fixed thereto; as by a rivet $24^a$.

What is claimed is:

1. A floor waxing iron having a lozenge shaped body, said iron having a rim bead around its top and a set of V-shaped spring grips whose remote ends are pivoted on the

iron rim and whose sides are yieldably connected by a crotch loop and are operative to clinch a smoothing cloth over the beads.

2. A floor polisher having a rim bead, and a complementary waxer fitting within the rim, and means to hold the waxer in place and including a rigid rim lip at one end and a snap hook fixed to the polisher at the other and having a guide head adapted to yield under pressure of the waxer as this is forced into place on the polisher.

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