To all whom it may concern:

Be it known that I, ANTHONY UHLYARIK, a subject of Hungary, and a resident of Ossining, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Machines for Use in Cleaning Table-Cutlery, of which the following is a specification.

The invention relates to improvements in machines for use in cleaning table cutlery or the like, and it consists in the novel features and structure hereinafter described and particularly pointed out in the claims.

Ordinarily table knives and forks are cleaned by being manually rubbed with a cloth on which a fine powdered abrasive substance has been applied.

The object of my invention is to provide an adequate machine having suitable pads to which an abrasive substance may be applied and between which the knives and forks may be tightly squeezed while being manually pushed back and forth so as to effect the rapid and effectual cleaning of the same.

The machine of my invention enables table cutlery to be very rapidly and efficiently cleaned, with less labor, time and trouble than are required with the customary handmethods of cleaning knives and forks.

The invention will be fully understood from the detailed description hereinafter presented, reference being had to the accompanying drawings, in which:

Figure 1 is a side elevation of a machine for cleaning table cutlery embodying my invention; Fig. 2 is a top view of the same; Fig. 3 is an end view of the same taken from the left hand end of Fig. 1 and showing the machine as applied to the edge of a shelf or table, the latter being partly broken away; Fig. 4 is an enlarged central vertical section through the machine, a part of the handle and a portion of the securing bracket being broken away; Fig. 5 is a detached sectional view of a portion of the machine on the dotted line 5—5 of Fig. 4; Fig. 6 is a sectional view through the lower pad or cushion of the machine on the line 6—6 of Fig. 7; Fig. 7 is a transverse vertical section through the same on the dotted line 7—7 of Fig. 6; Fig. 8 is a detached top view of the lower pad or cushion of the machine; and Fig. 9 is a detached side elevation of the upper and lower pads or cushions between which the cutlery is moved during the cleaning operation.

In the drawings, 10 designates an elongated tray which forms the base of the machine supporting and carrying all of the other parts thereof and which by means of a bracket-arm 11 and screw 12 may be fastened upon the edge of a table, shelf or the like, in the manner indicated in Fig. 3.

The tray 10, of elongated form, as shown in Fig. 2, has a raised central portion or table 14 of any suitable outline but preferably of elongated outline and of greater width at one end than at the other. Upon the table 14 I secure a rubber pad 15 which will be of adequate thickness to form a cushion and will have embedded in it a metal plate 16 formed with countersunk recesses to receive nuts 17 which are provided to take the upper ends of the screws 18 by which the pad is held upon the table 14. The rubber of the lower pad 15 is molded upon and around the plate 16, and said pad conforms to the outline of the top of the raised portion or table 14.

I apply upon the pad 15 a suitable covering fabric such as wool, leather, or other suitable soft material 19, upon which the abrasive substance will be sprinkled and which is detachably held upon the pad 15 by means of an encompassing metal frame 20 which is hinged at 21 to the table 14. When the frame 20 is turned upwardly upon its hinge 21 the covering fabric 19 may be applied upon the pad 15 and thereafter when the frame 20 is turned downwardly again to its position shown in Fig. 4 it will firmly clamp the edges of said covering fabric and hold the latter smoothly over the pad 15.

The frame 20 constitutes a clamp for binding the edges of the covering 19 and detachably holding said covering. The spring latch 41 may be provided for locking the free end of the frame 20 in its lower position, and this spring latch may be operated by a press-knob 22 to free the frame 20 when it is desired to turn the latter upwardly on its hinge 21.

Above the table 14 and pad 15 and extending lengthwise of the machine, is provided a pivoted handle frame 23 which has a depending bed 24 corresponding in outline with the table 14 and being directly in vertical line with the same. Upon the lower surface of the bed 24 I secure the upper pad or cushion 25 which corresponds in outline 25.
with the lower pad or cushion 15 and receives a suitable covering fabric 26 which is held in place by a hinged frame 27 corresponding with the frame 20. The frame 27 is hinged at 28 and serves to bind the edges of the covering fabric 26 and hold said fabric smoothly upon the lower surface of the pad 25. The free end of the encompassing frame 27 may be locked when said frame is closed upon the fabric 26, by means of a spring latch 29 which may be operated to free the frame 27 by means of a small knob 30 (Figs. 1 and 2) projecting upwardly through the upper surface of the bed 24.

The frames 20, 27 not only bind the covering fabrics upon the pads, but they also can be used in resisting any pressure which might tend to move the pads laterally from their supporting surfaces. I contemplate supplying the machine with several sets of the coverings 19, 26, and therefore I provide the machine with means for detachably holding the coverings on the pads. Some of the coverings will be of stouter material than others and some of the coverings will be intended to receive a stronger abrasive material, as when steel blades are being cleaned, than would be required in cleaning silver cutlery.

It will not be necessary to throw the coverings away each time the cutlery is cleaned, but the coverings may be left on the machine or taken off and thereafter restored whenever it is desired to again use the machine. In cleaning steel blades I might sprinkle a fine grade of emery on coverings 19, 26, and if thereafter I should desire to clean silver or plated knives I would remove the coverings having the emery on them and place a soft covering, such as wool, on the pads and upon such soft covering apply a fine soft abrasive substance, such as powder usually sold in stores for cleaning silver tableware.

I preferably clean knife blades between the wider portions of the pads 15, 25 and forks between the narrower ends of said pads, and in order to facilitate the cleaning of the tines of the forks I transversely groove the lower and upper pads 15, 25 in the manner shown in Fig. 9, there being a series of the grooves, and said grooves forming V-shaped ridges adapted to the cleaning of forks rubbed transversely between the pads.

The handle frame 28 is elongated and hollow and pivotally secured on a pin 31 in the bifurcated upper end of the rod 32 whose lower end is threaded and mounted within the threaded bore of a vertical standard 33 located at one end of the tray 10. At the other end of the tray 10 is provided a standard 34 whose upper end is bifurcated to receive a vertical web or flange 35 formed on the handle frame 28 and thereby center said frame properly over the table 14, so that when the machine is to be put into use the pads 15, 25 may be readily placed and kept in vertical line with each other.

As a convenient handle for the frame 28 I insert therein a steel 36 of the kind usually employed for sharpening knives, the rod of the steel being inserted longitudinally within the frame 28 and the handle 37 of the steel being allowed to project and constitute the handle for the frame 28. The frame 28 is open at its upper side, as shown in Fig. 2, so as to expose the steel 36 and permit of a knife being sharpened on the latter. I provide the outer end of the frame 28 with a socket 38 to receive the inner end of the handle 37, and on said end of said handle I apply a pin 39 to enter and become locked in a right-angular slot 40 formed in the socket 38, after the manner of a bayonet joint.

The hinging of the handle-frame 28 to the upper end of the rod 32 enables the pad 25 to be moved upwardly from the pad 15 and turned upside-down, so that the abrasive material may be sprinkled or applied upon or rubbed into the cover-fabric 26. The hinging of the handle-frame 28 also enables a variable relation of the pad 25 to the pad 15, whereby the machine is rendered adaptable to receive between the pads the various thicknesses of table cutlery generally in use.

The jaws at the upper end of the post 34, not only serve to guide the handle frame 28 to a correct position with the pad 25 above the pad 15, but serve during the use of the machine to prevent the handle frame from moving laterally. The threaded rod 32 is vertically adjustable within the threaded bore of the post 33, and this adjustment is desirable in adapting the machine for different thicknesses of cutlery and different thicknesses of covering fabrics 19, 26. The rod 32 may operate as a swivel when the handle frame 28 is elevated from the post 34, and by reason of this swiveling action, the handle frame may, after being turned upwardly to a vertical position, be rotated, with the rod 32, angularly and then turned down in a direction to leave the pad 25 at the upper side of the handle frame and above the tray 10, and this is desirable since at such time the abrasive material may be applied on the then upturned cover 26 and any surplus of the material that might fall over the edges of the pad, will pass into and be caught by the tray 10.

In the employment of the machine, the pads 15, 25 being on their respective beds and the covering fabrics 19, 26 having been applied to said pads, abrasive material will be placed on said covering fabrics and the knife or fork to be cleaned will be placed on the lower pad and the upper pad will be squeezed down upon it by pressure applied to the handle 37, and thereupon the user of the machine will move the knife or fork back
and forth transversely between the two pads, while at the same time the pressure is maintained on the handle 37. The result of this will be that the knife or fork will be rapidly cleaned. In the cleaning of a knife-blade, the latter will usually be applied between the broader ends of the pads 15, 25 and when the tines of a fork are to be cleaned, they will be rubbed back and forth transversely between the narrow corrugated end portions of said pads. Any abrasive material pushed from between the pads by the rubbing back and forth of the knife or fork, will be caught in the tray 10, and in this way the abrasive material may be kept from spilling around. If it should be desired after cleaning a knife to sharpen it, it will be drawn back and forth on the steel 29 exposed through the upper side of the handle-frame 23.

I prefer to make the lower and upper cushion pads 15, 25 of rubber and supply detachable coverings for said pads but do not limit my invention to rubber pads since said pads may be conveniently made of felt or other suitable material. Nor do I limit my invention in every instance to the detachable coverings 19, 26, since if the pads 15, 25 are of material like felt the abrasive material may be applied directly to them, but by providing a set of coverings 19, 26 a broader range of utility for the machine for different kinds of cutlery may be secured.

What I claim as my invention and desire to secure by Letters Patent is:

1. A machine for use in cleaning table cutlery comprising an elongated base-tray having a raised table 15, a pad 15 having embedded in it a metal plate 16 formed with countersunk recesses containing nuts 17, screws 18 extending through said table and engaging said nuts for securing said pad on said table; an encompassing frame 20 hinged to the table 14 and extending upwardly therefrom along the edges of said pad, a latch for securing said frame in its operative position, a handle-frame having a depending bed 24 above said table and provided with a pad 25 corresponding with said pad 15, an encompassing frame 27 hinged to said bed 24 and extending downwardly therefrom along the edges of said pad 25, and a latch for securing said frame 27 around said pad 25; substantially as set forth.

2. A machine for use in cleaning table cutlery comprising an elongated base-tray having a raised table 14, a pad 15 secured on said table, a handle-frame having a bed 24 above said table and provided with a pad 25, said pads being of elongated form and wider at one end than at the other and at the narrower end being transversely grooved with the grooves on the lower pad arranged to receive the ridges on the upper pad; substantially as set forth.

3. A machine for use in cleaning table cutlery comprising a base-tray having a raised table 14, a pad 15 secured on said table, and a handle-frame having a depending bed 24 above said table and provided with a pad 25 corresponding with said pad 15, means connected with said tray for staying said handle-frame against lateral movement during the use of said machine, and means transversely hinging and vertically swiveling the shank-end of said frame to said tray, whereby said handle-frame may have a hinged movement and may also without detachment be swiveled or turned angularly and folded downwardly over the pad 15 with the pad 25 facing upwardly; substantially as set forth.

4. A machine for use in cleaning table cutlery comprising a base, an elevated pad thereon, a covering fabric over said pad to receive abrasive material, a hinged encompassing frame to detachably secure said covering on said pad, a spring-latch for securing said frame in its operative position, a handle-frame having a bed carrying a depending pad above said elevated pad, a covering fabric on said depending pad to receive abrasive material, a hinged encompassing frame to detachably secure said covering on said depending pad, and a spring-latch for securing said frame around said depending pad; substantially as set forth.


ANTHONY UHLYARIK.

Witnesses:

CORNELIUS J. RUMANN,
ARTHUR MARION.