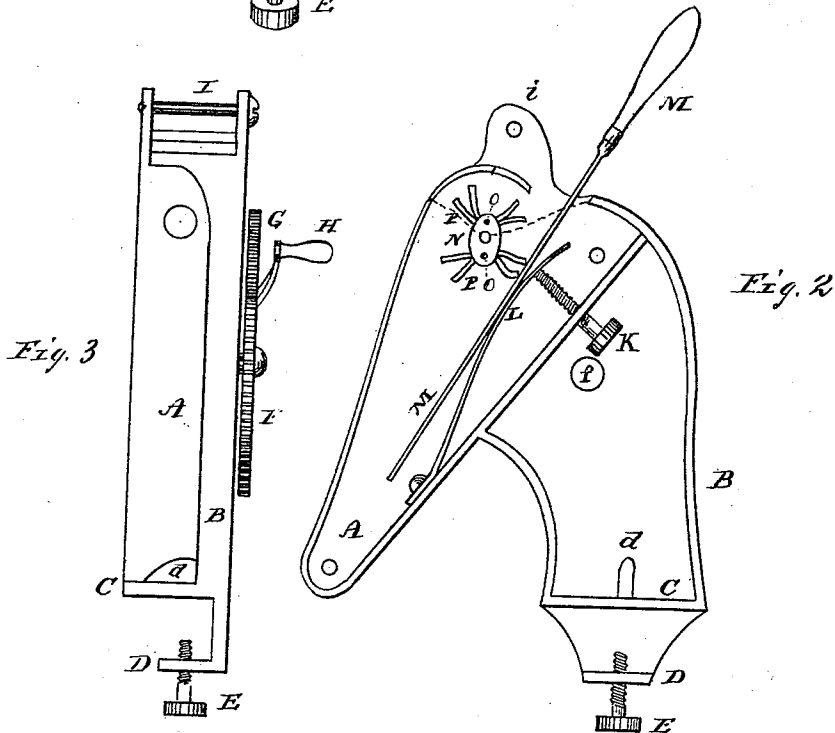
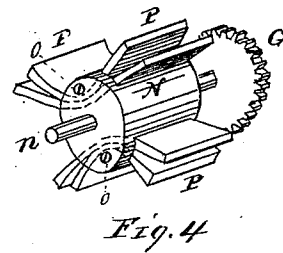


Patented Aug. 31, 1875.



INVENTOR.

Christian G. Singer

UNITED STATES PATENT OFFICE.

CHRISTIAN G. SINGER, OF PENNVILLE, PENNSYLVANIA.

IMPROVEMENT IN KNIFE-SCOURING MACHINES.

Specification forming part of Letters Patent No. **167,200**, dated August 31, 1875; application filed July 27, 1875.

To all whom it may concern:

Be it known that I, CHRISTIAN G. SINGER, of Pennville, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Knife-Scouring Machines, of which the following is a specification:

The improvement consists in the construction and arrangement of the scouring-box, rubber, adjusting-spring, and covering-plate or support, provided with foot-ledges and clamping-screw, to connect the whole to the edge of a table, and operated by means of a crank-handle and cogged gearing, for the purpose of scouring and polishing knives, &c., with ease and dispatch.

The accompanying drawings illustrate the construction and operation of the same, which, with the letters of reference marked thereon and a brief explanation, will enable those skilled in the art to make and use the device, and in which drawings—

Figure 1 is a perspective view of the covering-plate and gearing. Fig. 2 shows the flanged box open, with the rubber, &c., in place. Fig. 3 is a side elevation. Fig. 4 illustrates the rubber or buffer.

The covering-plate B on one side forms a cover for the flanged box A. The lower end of B has projecting flanges C D, to embrace the edge of a table, and a binding-screw, E, as in common use. The box portion A has a raised flange, say two inches wide, with a splice-section on one side, that can be removed by withdrawing the upper screw-bolt I. Part of the bearing for the shaft *n* of the rubber N is made in said segment, the other half in the fixed portion of the box A, for the purpose of removing the rubber and its shaft, to which the pinion G is keyed, and made removable also. This flange is curved over, to allow the rubber to revolve freely. There is a flange-lip or open space, through which the blade of the knife or the like is inserted. The flange above on one side is narrowed, and extends down and around the edges of the covering-plate B, simply to give it strength in the casting and a better finish. There is a cogged wheel, F, with a handle, H, at-

tached, as shown, which wheel drives the pinion G on the rubber-shaft *n*. This rubber hub or shell N is closed at the ends, embracing the shaft which revolves it, and is provided with stout wires or rods, *o*, at two or more points, and longitudinal slots across said shell, be it oval or cylindrical in form. The rubbers or buffers P, made of leather, felting, or any desired material or number of pieces, are inserted through the slots, and around the rods *o*, and brought out again, and trimmed in length to adapt them to the case.

There is a flat bearing or spring, L, attached to the inner side of the straight flange forming the scouring-box A. This spring is made adjustable by a set-screw, K.

The operation will be readily understood on simple inspection. Fig. 2 shows a knife-blade, M, inserted into the box, between the edges of the rubbers P and spring L. These rubbers, provided with sand, emery, or any scouring or polishing material, being rapidly rotated, aided by the pressure of the spring-plate L, will speedily produce the desired effect with ease.

I am aware that polishing devices and knife-scouring machines are used of various forms, such as Patent No. 48,755, 1865, in which two wheels with intermediate rubbers are revolved by a handle; but I am not aware of any designed and constructed substantially as herein specified, in the arrangement and operation, and manner of clamping to a table as a whole. Therefore,

What I claim as my invention is—

The combination of the flanged box A with the rubbers P in a slotted hub, N, pinion G, spring or bearing plate L, set-screw K, supported by the covering-plate B, which is provided with ledges C D and binding-screw E, gearing F G, the whole constructed and arranged as and for the purpose specified.

CHRISTIAN G. SINGER.

Witnesses:

WM. B. WILEY,
JACOB STAUFFER.