

A. C. Kaiser,
Knife Scourer.
N^o 84,552. Patented Dec. 1, 1868.

Fig. 1.

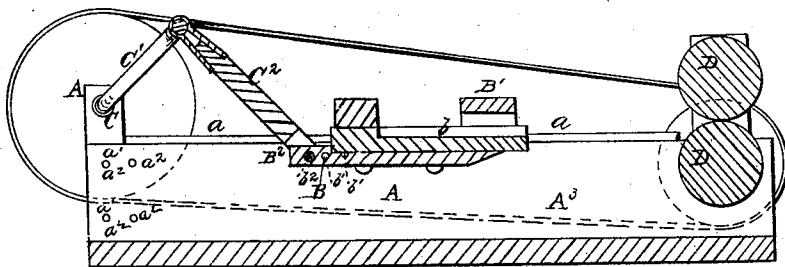


Fig. 2.

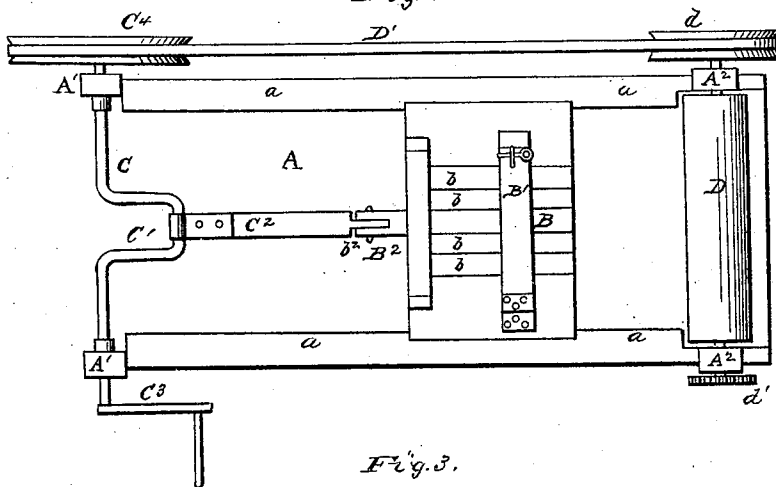
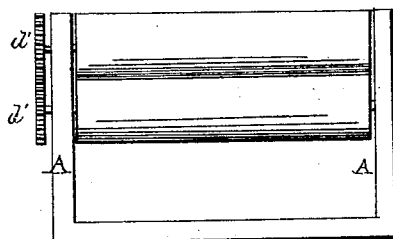


Fig. 3.



Witnesses

Robert Burns

G. W. North

Inventor

A. C. Kaiser by his atty

M. Randolph

United States Patent Office.

A. C. KAISER, OF VIENNA, MISSOURI.

Letters Patent No. 84,552, dated December 1, 1868.

IMPROVED KNIFE-CLEANER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, A. C. KAISER, of Vienna, in the county of Maries, and State of Missouri, have made certain new and useful Improvements in Knife-Cleaner; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention has for its object the construction of a machine for cleaning a number of table-knives at one and the same time.

Briefly, the machine consists of a reciprocating bed-plate, to which the handles of the knives are secured, and which is actuated by a crank, so as to throw the blades of the knives forward and backward, at each revolution of the machine, between a set of cushioned rollers revolving at the same time, and coated with brick-dust or other scouring-substance.

To enable those skilled in the art to make and use my improved machine, I will proceed to describe its construction and operation.

Figure 1, of the drawings, is a sectional elevation of the improved machine, and

Figure 2 is a plan of the same.

Figure 3 is a front elevation.

The frame A may be made in any desired form of construction, suitable for sustaining the operative parts of the machine.

On the top edge of this frame, ways or tracks *a* will be provided, on which the bed-plate B will slide back and forth.

This bed-plate is operated from the driving shaft C by means of the crank C' and the connecting-rod C'.

The driving-shaft is operated by manual power, by turning the crank C', or by other suitable means.

The pillar-blocks A', which furnish bearings for the driving-shaft, are secured to the frame A by means of the bolts *a'*, two or more sets of holes, *a''*, being provided in the frame for the reception of the said assembling-bolts *a'*, in order that the said driving-shaft may be adjusted to a position more or less removed from the rubbing-rollers D at the other end of the frame, in order to accommodate knives with different lengths of blades.

The rubber-rollers D have their bearings in the pillar-blocks A', at the front end of the frame A, the bearings of the lower roller being fixed, as to vertical position, while those of the upper roller are made to yield in a vertical direction by means of rubber or spiral springs placed above them, in order to hold them down to the lower roller, and at the same time allow the upper roller to rise, in order to accommodate a blade thicker than usual between the rollers.

One of the rollers D has a pulley, *d*, on the outer end of its axle, which pulley is driven by the belt D', from the spur-wheel C', on the outer end of the crank.

The two cog-wheels *d'*, on the other ends of the said rollers, communicate motion from the driven roller to the other.

The peripheries of the rollers D' are to be covered

or cushioned with some textile fabric, as shown in the sectional detail of those rollers.

As is shown in the said detail, one end of this covering-piece *d''* may be inserted and secured in a longitudinal groove in the periphery of the roller, the other end of the said piece being allowed to go loose, which arrangement will be beneficial in this, that, as the roller is turned, at every revolution of it, the loose end will drop down into the box A³, which contains the sand, brick-dust, or other scouring-material used, and which said box is placed directly below the rollers.

In this manner the rollers will be coated continually with the scouring-material.

Sockets *b*, to the number of one dozen, more or less, will be constructed in the front end of the bed-plate B, each socket being of the proper size and contour to readily seize and hold the handle of an ordinary table-knife.

When ready for use, as many knives as the bed-plate will accommodate, or as many as are to be cleaned, will be placed with their handles in the sockets *b*, and their blades projecting forward, and secured by means of the binder B' in this position.

The binder-piece is hinged to the bed-plate by one of its ends, and the other is fastened down by a button or hook when the knives are in place.

The knives being secured in this position, the crank C' will be turned, and the machine thereby set in motion, and the bed-plate will be operated back and forth, carrying the knives with it, and alternately thrusting the blades between the revolving rollers D and withdrawing them therefrom, and in this manner the knives will be quickly and thoroughly cleaned.

In addition to the provision above described for altering or regulating the position of the driving-shaft by means of its adjustable pillar-blocks, the relative position of the bed-plate will be further adjustable by means of one or more sets of holes *b'* in the draw-head B', for the reception of the coupling-pin *b''* that attaches the connecting-rod to the said draw-head.

The binder-piece B' has its bottom face covered with a cushion, *b''*, of India rubber, or some equally yielding and elastic material, so that when pressed down upon the handles of the knives they will be securely held in their sockets *b* thereby, without the possibility of injuring the most delicate handles.

This arrangement of the binder-cushion is clearly shown in the detail drawing.

Having described my invention,

What I claim, is—

1. The combination of the bed-plate B, its seats *b*, with cushioned rollers D, when arranged and operated substantially as described and set forth.
2. The bed-plate B, in combination with the driving-shaft C, resting in adjustable pillar-blocks A', and connecting-rod attachments B' *b'* *b''*, substantially as and for the purpose set forth.

Witnesses:

ROBERT ROWDEN,
THOS. J. ELLIS.

A. C. KAISER.