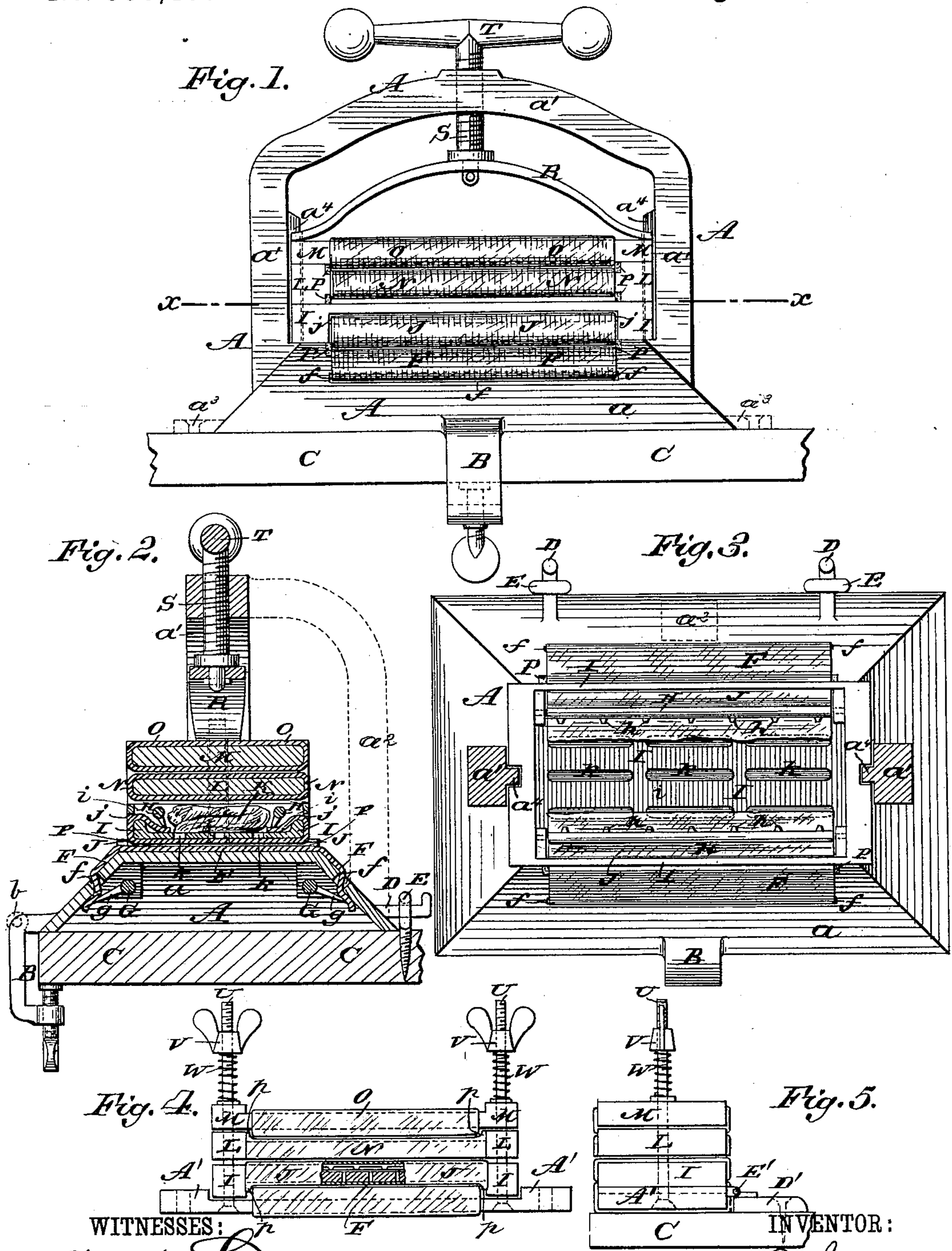


(No Model.)

R. W. JAMIESON.
KNIFE CLEANER.

No. 368,400.

Patented Aug. 16, 1887.



WITNESSES:

Chas. B. Beyer
C. Sedgwick

INVENTOR:

R. W. Jamieson
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT W. JAMIESON, OF PRINCE ALBERT, SASKATCHEWAN, NORTHWEST TERRITORY, CANADA.

KNIFE-CLEANER.

SPECIFICATION forming part of Letters Patent No. 368,400, dated August 16, 1887.

Application filed September 2, 1886. Serial No. 212,463. (No model.)

To all whom it may concern:

Be it known that I, ROBERT WALTER JAMIESON, of Prince Albert, Saskatchewan, Northwest Territory, Canada, have invented a new and Improved Knife-Cleaner, of which the following is a full, clear, and exact description.

My invention relates to machines adapted for cleaning and polishing the blades of table-knives, and has for its object to provide a simple, inexpensive, and durable device of this character, by using which the knife-blades may be cleaned thoroughly at both sides and at their back edges, and without strain on their handle-fastenings, and with economy of time and labor.

The invention consists in certain novel features of construction and combinations of parts of the knife-cleaner, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of my improved knife-cleaner. Fig. 2 is a central vertical transverse sectional elevation of the same. Fig. 3 is a sectional plan view of the knife-cleaner, taken on the line *x x*, Fig. 1. Fig. 4 is a front elevation of a modified form of the device, and Fig. 5 is an end elevation thereof.

I will first refer to Figs. 1, 2, and 3 of the drawings, which represent the preferred form or construction of my improvement.

The frame A of the knife-cleaner is preferably cast in one piece of metal, and comprises a base, *a*, and a bridge-piece or arch, *a'*. At one side edge of the base *a* a clamp, B, is provided, by which the cleaner may be secured to a table, C, in position for use, and this clamp may either be cast solidly with the base *a* or may be hinged to the base, as indicated at *b*, in dotted lines in Fig. 2. At the side of the base *a* opposite the clamp B there are cast on or fixed to the base a couple of hooks, D D, which may be engaged with eyes E E, fixed to the table C, to make the attachment of the cleaner to the table more secure, and these hooks and eyes also serve as fulcrums on which the entire machine may be swung over backward after the clamp B is loosened, to allow

the cleaning or polishing powders to be more conveniently placed between the abrading-surfaces of the pairs of cleaning and polishing blocks, presently described. In large heavy machines it may be desirable to brace the top of the bridge-piece *a'* of the frame A to the base *a* by a bent arm, *a''*, as indicated in dotted lines in Figs. 2 and 3 of the drawings. Instead of the clamp B, perforated lugs may be provided at the opposite ends of the frame, as at *a''' a'''* in dotted lines in Fig. 1, and through which lugs screws may be passed into the table.

The machine has two pairs of rubbing-blocks—a lower pair, for use first as cleaning-blocks, and an upper pair, for use afterward as polishing-blocks; and these pairs of blocks are faced with suitable fabric or leather coverings, between which the cleaning and polishing powder is placed, as presently explained.

The base *a* of the machine-frame forms the lower cleaning-block, and is provided with a facing, F, which covers the top plate of the base and extends downward at each side of the base, and is passed at its opposite edges through slots *f f* in the base, and said edges of the facing F are caught and held securely by teeth *g* on rods G, journaled at opposite ends of the base. (See Fig. 2 of the drawings.) The construction of these toothed rods G *g* will be better understood by comparing them with similar toothed rods, H *h*, which are journaled at the opposite ends of the upper cleaning-block, I, and within the top recess, *i*, of said block, to hold a facing-fabric, J, to the lower face of said block, said fabric J being passed at its opposite edges through side slots, *j j*, of the hollow block I, to be caught by the toothed rods H *h*, one at each side of the recess *i* of the block, and as shown clearly in Figs. 2 and 3 of the drawings.

The body of the block I, at the floor of its recess *i*, is provided with series of slots or holes *k*, through which water or moisture held by a sponge or other suitable absorbent fabric, K, placed in the recess *i*, may pass to wet or dampen the facing-fabrics J F and the knife-brick or other cleaning-powder placed between these facings.

The upper polishing-blocks, L M, are preferably made solid, and are covered at both

faces by suitable leathers, N O, respectively, which are wrapped around the blocks, and are fastened thereto by cement or otherwise, thus allowing these blocks to be reversed in position for using the other sides of the facings when one side is worn out by polishing the blades of the knives.

The top or bed of the base *a*, whereon the facing-fabric F rests, is sunken somewhat to provide transverse shoulders, in or against which strips, P, of rubbing or cleaning fabric are secured by cement or otherwise, and these strips P project past the ends of the opposing facing J of the block I, and thereby provide fabric-facings, against which the back edges of knife-blades may be rubbed for cleaning them while the opposite faces of the knife-blades are being cleaned by the opposite facings F J. The polishing-block L is formed with shoulders at opposite faces and ends, to which shoulders like transverse strips P, preferably made of leather, are fastened for polishing the back edges of knife-blades while their opposite faces are polished between the facings N O. The strips P at opposite faces of the block L allow polishing of the knife-blade backs whichever sides of the facings may be acting on the blades.

Instead of using the separate strips P, the ends of the facing-fabrics may extend downward or upward at the end shoulders of one of the cleaning and polishing blocks in the form of lips *p*, against which the backs of the knife-blades may be rubbed to clean and polish them, as in the modified form of the device shown in Fig. 4 of the drawings, these lips *p* being the full equivalent of the transverse strips P above described.

The opposite ends of the loose rubbing-blocks I L M are notched at opposite ends to fit vertically-rising ribs *a'* on the opposite uprights *a'* of the frame A, and a spring, R, also notched at the ends to engage these ribs *a'*, is swiveled to the lower end of a screw, S, which is threaded into the head of the frame A, and has a handle-bar, T, which may be turned to press the ends of the spring R onto the upper polishing-block M, or wear-plates fixed thereto, for regulating the pressure of the opposing pairs of cleaning and polishing blocks on the knife-blades passed between them. The ribs *a'* do not extend to the top cross-bar of the frame A, thereby giving room for lifting the rubbing-blocks M L I from the frame for renewal of their facings, or for reversing the blocks M L for using either of their facings as above described.

In the modification of the knife-cleaner shown in Figs. 4 and 5 the frame A is dispensed with and a base-block, A', to which the lower cleaning fabric or facing, F, is attached, has perforated lugs at its opposite ends, through which screws or nails may be passed to hold the cleaner to a table or other support, and the upper movable blocks, I L M, which are faced with suitable fabric or leather coverings, are held to the base-piece A' by bolt ends U, re-

ceiving thumb-nuts V, and having springs W on the bolts U between the nuts V and the top block, M, thus allowing compression of the blocks to each other by turning down the nuts, instead of by the screw S and spring R, hereinbefore described; and instead of using the hooks D and eyes E to allow swinging back of the cleaner, I may hinge a cleat or strip, D', by hinges E' to the base-block A', so that when the strip D' is screwed to the table the cleaner may be swung back on the hinges to allow the cleaning and polishing powder to be placed between the facings of the rubbing-blocks.

To prepare the machine for work, knife-brick will be supplied freely between the facings F J, which will be wet, and the moisture-giving sponge, pad, or fabric K will be placed in the recess *i* of the block I. Dry polishing-powder will be placed on the opposing faces of the facings N O, and all the rubbing-blocks will be clamped to each other, the clamp-spring of the blocks allowing them to yield to receive the knife-blades between their opposing facings.

The wet blades of knives, as they have been lifted from washing-water, will be entered between the lower facings, F J, with their back edges against the strips P P, one knife being held in each hand of the operator, and by drawing the knife-blades in and out both faces and the back edges of them will be cleaned of stains of every kind and the knives will be laid aside to dry, and when dry their blades will be passed between the facings N O for dry-polishing their opposite sides or faces, while their backs are polished by the strips P P on the block L. The rubbing-block clamp-springs will usually be adjusted to give greater pressure on the blocks when the knife-blades are being wet-cleaned than when they are being dry-polished.

The ends of the movable rubbing-blocks I L M and of the spring R may have tongues or lips, and the frame A may have grooves to receive the tongues to guide the blocks and spring R and prevent turning of the spring on the screw S, or dowel-pins may be used to hold the rubbing-blocks to each other and to the frame; but the arrangement of grooves in the blocks and spring and ribs on the frame, as above described, is preferred.

It is evident that the knives may be cleaned and polished very quickly and without strain on their handle-fastenings, and the cleaner may be made in various sizes, and may have either plain or ornamental finish, as the conditions of use and class of trade may require.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a knife-cleaner, the combination, with a base-piece, as at *a*, faced as at F, of a superposed block, I, faced as at J, and provided with a recess, *i*, and perforations *k*, and a sponge, pad, or fabric, K, placed in recess *i*, and means for holding the block I to the base-piece, substantially as herein set forth.

2. In a knife-cleaner, the combination, with
a frame or support, of an opposing pair of
rubbing - blocks provided with shoulders,
against which the backs of knife blades may
5 be cleaned or polished while the opposite faces
of the blades are operated on by the opposing
side faces of the blocks, substantially as herein
set forth.

10 3. In a knife-cleaner, the combination, with
a frame or support, of a pair of polishing-
blocks, each faced at both sides with leather or
equivalent material, and one of said blocks
provided with transverse strips P for polish-
ing the knife-blade backs whichever side fac-

ings of the blocks are in use, substantially as 15
herein set forth.

4. In a knife-cleaner, the combination of a
frame, A, blocks I L M, facings F J N O on
the frame and blocks, and said block I hav-
ing a recess, *i*, and apertures *k*, a sponge or 20
pad, K, placed in block I, guides for the blocks,
a spring, R, screw S, and handle T, substan-
tially as herein set forth.

ROBT. W. JAMIESON.

Witnesses:

HRY. S. DOUGLAS,

T. E. PATTESON.