

H. A. BYRNS.
Knife-Scourers.

No. 155,636.

Patented Oct. 6, 1874.

Fig. 1.

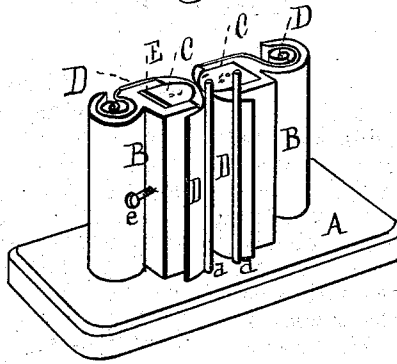
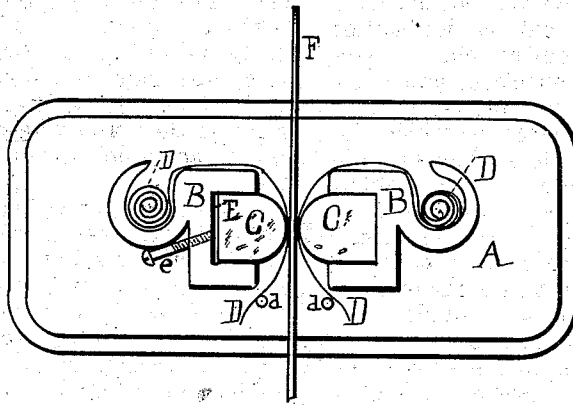


Fig. 2.



Witnesses.

Charles Letts.
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Inventor.

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By C. A. Shaw,
Att'y

UNITED STATES PATENT OFFICE.

HENRY A. BYRNS, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF HIS RIGHT TO OSBORNE M. SOUTHWICK, OF SAME PLACE.

IMPROVEMENT IN KNIFE-SCOURERS.

Specification forming part of Letters Patent No. **155,636**, dated October 6, 1874; application filed December 26, 1873.

To all whom it may concern:

Be it known that I, HENRY A. BYRNS, of Somerville, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Knife-Scourers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is an isometrical perspective view of my improved knife-scourer. Fig. 2 is a plan of the same.

Like letters refer to like parts in the different figures of the drawing.

My invention relates to that class of knife scourers or cleaners in which the knife is polished between yielding polishing or grinding surfaces; and consists in a novel construction and arrangement of devices, as hereinafter more fully set forth, the object being to provide a neat, cheap, and effective implement for the purpose for which it is intended.

In Fig. 1, A is the bed-piece, by which the scourer is fastened to a table or other suitable support; B B, the uprights; C C, the rubber springs or cushions; D D, strips of emery-cloth; *d d*, the guards, and *e* the set-screw. The uprights B B are about two inches in height and cast in one piece with the body or bed-piece A, being provided with circular slotted recesses, in which coils of emery-cloth are disposed, and with square recesses for holding rubber cushions C C, as shown in Fig. 2. These cushions extend from the base A to the top of the uprights B B, and are constructed with rounded faces, which, when they are arranged in position, come nearly or quite into contact. The guards *d d* consist of upright wires inserted in the bed-piece A, and extending slightly above the parts B B.

From the foregoing description the nature and operation of my invention will be understood by all conversant with such matters. Two strips of emery-cloth, several inches in length and corresponding in width with the height of the uprights B B, are rolled up and

inserted vertically in the circular recesses of said uprights, as shown in Fig. 2. One end of each of the strips of cloth is then drawn through between the cushions C C and carried behind the guards *d d*, the object of which is to keep the ends of the strips separated and from coming into contact with the knife being cleaned. The scourer being thus prepared, the knife F is inserted between the strips of cloth, as shown in Fig. 2, which strips will be forcibly pressed against the sides of the same by the action of the spring-cushions C C, when, by drawing the knife rapidly back and forth, it will be thoroughly and perfectly polished. Behind one of the cushions there is a follower, E, against which the set-screw *e* impinges. In case the expansive action of the spring-cushions C C is not sufficient the screw can be used to increase the pressure on the knife.

It is conceded that emery is one of the best known substances for polishing purposes, and that it can be made to adhere to cloth more readily and with greater tenacity than to nearly any other substance. For this reason I have found that a knife-scourer constructed and arranged in the manner described is more effective than any other of which I have any knowledge.

It will be understood that the strips of cloth must be so arranged in the scourer that their emery-covered surfaces will be brought together when the knife is withdrawn, and that after the emery is worn from the cloth at the point between the spring-cushions C C, the strips D D can be drawn through the scourer a slight distance, and thus bring new polishing-surfaces to bear upon the knife. Emery-paper can be used instead of the cloth, if preferred.

I am aware that knife-scourers have been constructed in which emery-covered rollers and flat surfaces covered with emery have been used in conjunction with springs for pressing such surfaces against the knife, and I do not claim any part of such a knife-scourer when in and of itself considered. I am also aware that in the rejected application of Alonzo T. Boone, filed September 15, 1866, a knife-scourer is described having rubber

springs, in combination with emery-cloth faces or pads, forming polishing-surfaces interiorly arranged; but the mechanism of said Boone is essentially different from my invention in many important respects, having no reserve coil of emery-cloth vertically arranged in receptacles formed in the body of the implement, which is a distinctive feature of my invention. I therefore claim nothing shown or described in said rejected application when in and of itself considered; but

What I do claim is—

1. The combination of two elastic contiguous pads and their respective supporting-frames with a movable strip or strips of em-

ery-cloth, whereby the cleaning-surface, when worn, can be renewed by drawing a fresh portion to the line of contact.

2. The uprights B B, provided with the circular slotted receptacles for containing the rolls of emery-cloth, and the square receptacles for the spring-cushions C C, substantially as set forth and specified.

3. The guards *d d*, arranged and used substantially as and for the purpose stated.

HENRY A. BYRNS.

Witnesses:

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