

Improvement in Knife and Fork Scourers.

Patented May 9, 1871.

Fig. 1.

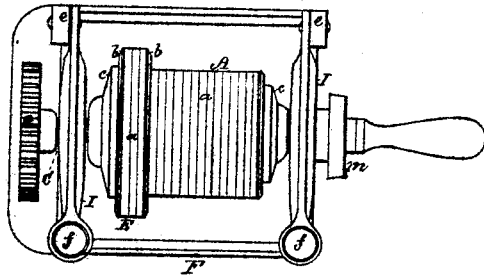


Fig. 3.

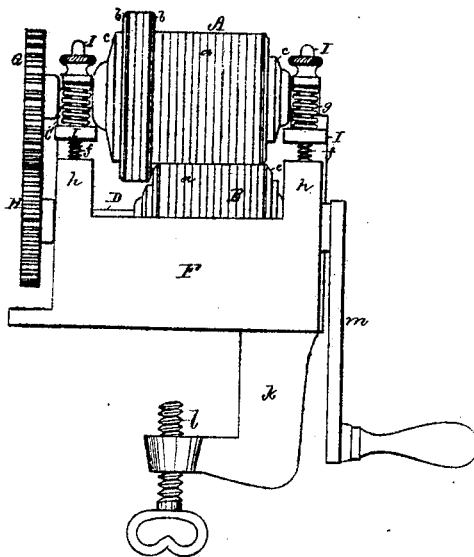
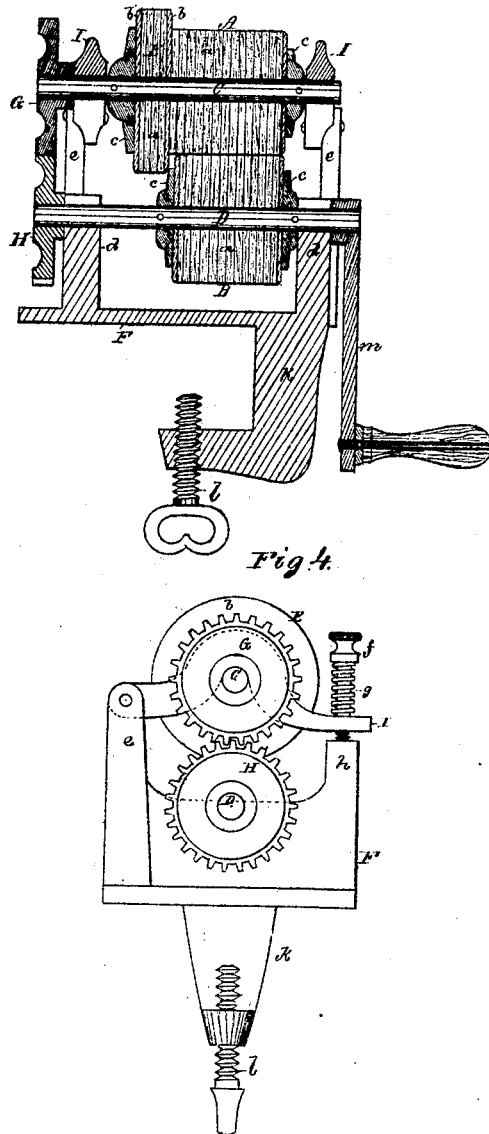


Fig. 4.



L. R. Piper.
L. R. Moore

by his attorney

R. H. Enay

United States Patent Office.

ELIEZER JEWETT MARSH, OF LEOMINSTER, MASSACHUSETTS.

Letters Patent No. 114,578, dated May 9, 1871.

IMPROVEMENT IN KNIFE-AND-FORK SCOURERS.

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

To all persons to whom these presents may come:

Be it known that I, ELIEZER JEWETT MARSH, of Leominster, in the county of Worcester, in the State of Massachusetts, have invented a new and useful Machine for Scouring Knives and Forks; and I do hereby declare the same to be fully described and represented in the accompanying drawing, of which—

Figure 1 is a top view,

Figure 2 a vertical section,

Figure 3 a front view, and

Figure 4 a side elevation of such machine.

In the drawing—

A and B are two scouring-cylinders or rollers, each composed of disks A of felt, arranged side by side upon horizontal shafts C or D.

The upper of the said rollers has another such roller or cylinder, E, of larger diameter, arranged alongside of it, so as to project down by one end of the lower roller, in manner as shown.

At each end of the series of disks of felt of the roller E there is a disk, *b*, of a harder or stiffer material, such as sole-leather or rawhide, one of such disks *b* being directly between and against the two series of felt disks of the rollers A and B.

The roller B is also formed of disks of felt, with leather terminal disks *b b*, the several disks being arranged together and on the shafts C D in manner as represented, and being held in place on such shafts by heads of metal *c c* fixed therein and disposed as shown in fig. 2.

This method of making the rollers renders them much preferable to rollers made of India-rubber tubes or cylinders, or cloth coated with India rubber and wound around the roller-shafts. Were it not for the sole-leather or rawhide terminal disks applied to the felt disks of the roller the latter, while in use, would soon become spread apart and broken down. A metallic terminal disk cannot be used, as it would not wear down with the felt disks, and would be highly injurious in its action on a knife-blade. The rollers, when made of felt disks, with rawhide or leather terminal disks, are found to last longer and to operate to better advantage than when composed either wholly of felt or leather disks.

The lower roller-shaft is supported in bearings *d d* in the sides of a trough or box, F, to hold the scouring-powder or material.

The two shafts have connecting-gears G H fixed on them, and the upper shaft is borne downward by two levers, I I, which are pivoted to standards *e e* erected on the box or trough.

Screws *f f*, provided with springs *g g*, to rest on the levers and against the shoulders of the heads of such screws, go down through the levers, near their front or free ends, and screw into standards *h h* erected in the trough.

Furthermore, the trough is provided with a clamp-arm, *k*, and screw *l*, arranged as shown, and there is a crank, *m*, fixed on the shaft of the lower roller.

The object of the additional or largest roller E, arranged and combined with the two cylinders A and B, as described, is to effect the scouring of the back of the blade of a knife while the opposite sides of such blade may be in the act of being scouring by the two cylinders A B. The said roller or cylinder E is also for use for scouring the parts of a fork, such as cannot conveniently be scoured by the other rollers or either of them.

While revolving the crank while a knife-blade may be between the rollers A B and be drawn back and forth it will be scoured on its sides, and by pressing the back against the side of the auxiliary roller such back may also be cleaned at the same time.

I am aware of the scouring-machine shown in the United States patent No. 13,883, dated December 4, 1855, and therefore make no claim to such, or any part, combination, or arrangement of parts described in such patent.

I am also aware of the United States patent No. 27,773, and make no claim to any thing, combination, or arrangement of parts therein set forth.

I do not use, in the construction of my machine, two pairs of polishing-rollers, combined with mechanism to cause one pair to revolve in directions opposite to those of the other pair; nor do I use with such four rollers and their operative mechanism a fifth roller of larger size. In my machine I employ three rollers only.

I therefore claim as a new manufacture—

1. The improved machine, constructed as described or provided with the three rollers A B E only, arranged and combined with the two shafts C D and the connecting-gears, and to operate as set forth.

2. In the knife-scouring machine, as described, the rollers as made of the series of felt and rawhide or leather disks *a b*, arranged together and with the shafts C D and metallic heads *c c*, as set forth.

ELIEZER J. MARSH.

Witnesses:

R. H. EDDY,
J. R. SNOW.