Wm. Fosket,

Grinding Cutlery.

No. 74.214. Patented Feb. 11. 1868

Fig. 1.

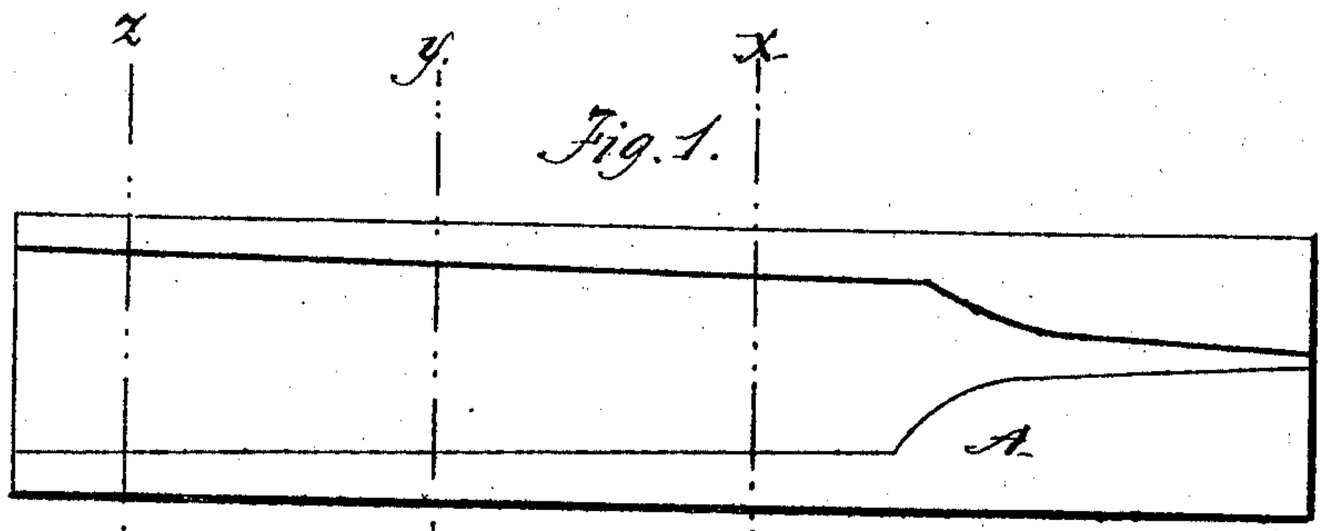


Fig. 2

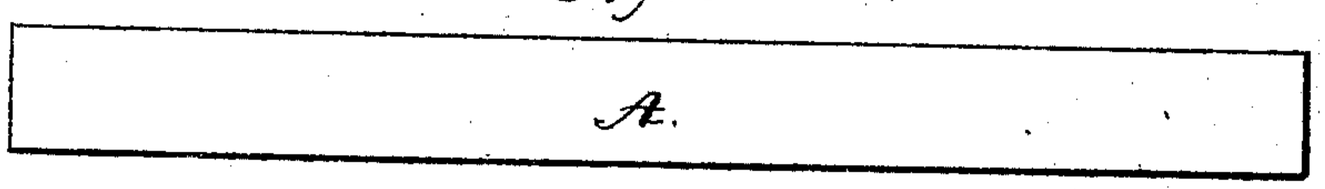
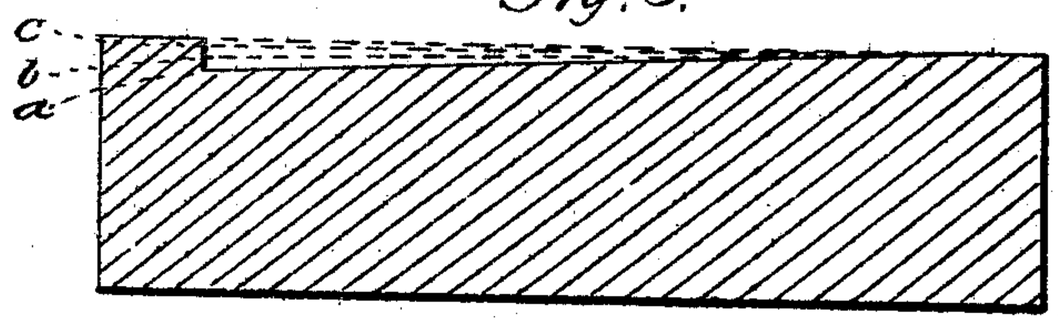


Fig. 3.



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WILLIAM FOSKET, OF MERIDEN, CONNECTICUT, ASSIGNOR TO MERIDEN CUTLERY COMPANY.

Letters Patent No. 74,214, *dated February* 11, 1868.

IMPROVED APPARATUS FOR GRINDING CUTLERY.

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, WILLIAM FOSKET, of Meriden, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Apparatus for Grinding Cutlery; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front or face view of the matrix.

Figure 2, a side view, and in

Figure 3, a transverse section.

This invention relates to an improvement in machines for grinding cutlery, such as was patented to me December 26, 1865. In that invention the matrix which is holding the knife against the grindstone, is guided by cams, so as to give to the surface of the knife the peculiar form desired. This requires a very nice, and in many cases a very difficult adjustment, to overcome which is the object of the present invention.

In the original machine the matrices are formed simply with reference to securely holding the blade while being ground. The present improvement consists in forming the matrix so that it not only holds the blade, but dispenses with the adjustment heretofore required to give the desired form to the blade, and so that a matrix, with its blade, may pass directly, and with regular, even movement, to or across the stone.

To enable others to construct my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is a bar or plate, upon the surface of which the matrix is formed, the upper face of the plate being level and true. Into this face I form a recess corresponding to the form of the knife, that is to say, in the section upon line *x x*, as denoted by the black line *a*, fig. 3, upon section *y*, as denoted upon the red line *b*, and upon section *z z*, as denoted upon the blue line *c*, thus giving to the matrix, below the level surface of the plate, the full curvature or taper required for the blade. One side of the blade having been properly formed, it is laid into the matrix that side down. In doing this it will be observed that as the whole twist, wind, or taper is formed in the matrix, the heel of the blade will lie hard down into the matrix, while the point will rise a little therefrom, but when presented to the stone, the pressure upon the stone will spring the point down into the matrix, and the surface of the blade will pass directly and regularly across the stone without any other than the direct forward movement of the matrix, and the blade when completed will have its surfaces formed the same as in the machine before referred to, and both sides alike.

I have described this as having the first side of the blade formed before being placed in the matrix, but this is not essential, as one matrix may be made a little deeper, so as to leave upon the unground side sufficient material for grinding of that side after the first has been ground. In either case the full object of my invention is accomplished, which is the rigid holding and movement of the die or matrix without other movement than that required for its passage upon or across the stone, or other grinding-apparatus.

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

Constructing the matrix in machines for grinding cutlery, substantially in the manner described, so that a single and direct movement only is required for the matrix to present the blade to the grinding-apparatus.

WM. FOSKET.

Witnesses:

JOHN H. SHUMWAY,

A. J. TIBBITS.