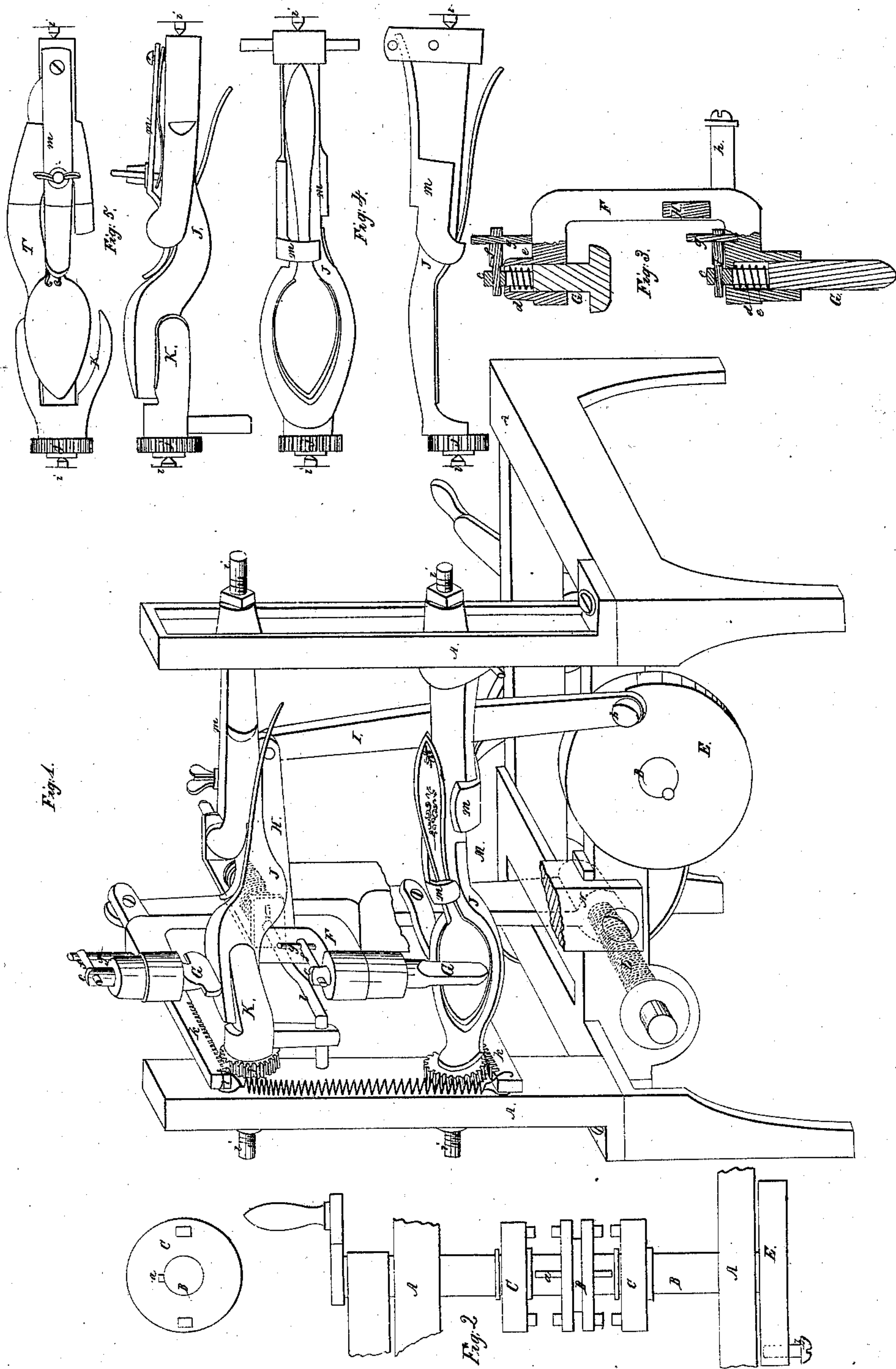


L. S. White,
Burnishing Machine.

N^o 21,304.

Patented Aug. 24, 1858.



UNITED STATES PATENT OFFICE.

LE ROY S. WHITE, OF HARTFORD, CONNECTICUT, ASSIGNOR TO E. W. SPERRY, E. HURLBUT, AND J. H. ASHMEAD, ALL OF SAME PLACE.

IMPROVED BURNISHING-MACHINE.

Specification forming part of Letters Patent No. **21,304**, dated August 24, 1858.

To all whom it may concern:

Be it known that I, LE ROY S. WHITE, of Hartford, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Machines for Burnishing; and I do hereby declare that the same is described and represented in the following specification and drawings; and to enable others skilled in the art to make and use it, I will proceed to describe the construction, referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this improvement consists in the construction and adaptation of machinery for burnishing spoons and other ware.

Figure 1 in the accompanying drawings is an isometrical view. In Fig. 2 is shown the operating shaft and the mode of applying the power. Fig. 3 is the burnishing-stock. Figs. 4 and 5 are the holding or rolling jacks.

A is the frame-work.

B is the operating-shaft.

C is the driving-pulleys, loose upon the shaft, and secured in place by collars.

D is a clutch on the shaft, which plays each way up to the pulleys on a spline, *a*, let into the shaft A. One of the pulleys receives an open belt, the other a cross-belt. Thus the motion of the machine may be changed from one direction to the other by changing the clutch from right to left.

E is the crank-plate.

b is the pin.

F is the burnishing-stock, which receives its motion through the arm H and the connection I.

G are the burnishers, having a shank, *c*, to receive the spring *d*, both of which work in the socket *e*, and are kept in place by a guard-pin, *f*, passing through the upper end of the burnisher-shank, and the other end working on the guide-pin *g*, allowing the burnisher freely to adjust itself to any uneven surface that may be presented, and oscillates or vibrates upon the fulcrum-pin *h*.

J is a holding-jack, constructed in such form and shape as may be required for different kinds of ware to be burnished, and hung upon centers *i*, or bearings, if desirable.

j are gears secured upon the end of the jacks J, and by which they receive their motion from the rack-arms *k*.

K is a swivel-arm collar, having an arm projecting downward to receive the spring-rod *l*, which holds or guides the collar K in the right position, and is used more particularly when burnishing the bowl of the spoon, to keep it from slipping sidewise while the burnisher is at work on the opposite edge of the bowl of the spoon, the necessity for which does not exist only in cases like or similar to the one described.

m are grapple-irons or springs to hold the work on the jacks while the burnishing is being performed, and made more secure by means of thumb-screws, sliding clasps, or other fastening device best adapted for the various kinds of ware to be burnished.

L is a screw-spindle.

M is a pulley on the end of the said spindle, driven from a pulley on the shaft B.

N is a nut fitted to and working on the screw-spindle L, having an upright arm to which the rack-arms *k* are attached at one end. Said rack-arms are held to their place in gear by means of springs, so as to allow of lifting the arms and moving the jack when desirable.

I have described this machine as especially adapted for burnishing spoons, oval handles, &c.

It will readily be seen and understood that variations must be made for different kinds of ware; also that the same motion may be produced by different devices. I do not therefore wish to confine myself to the particular way or mode of operating as described—as, for instance, the revolving motion of the jack may be produced by arms and levers, &c., instead of gear. Thus it will be seen by the use of this machine the work of burnishing, hitherto unpleasant and disagreeable, can be rapidly and perfectly performed by machinery, which hitherto has been done successfully only by hand-work.

What I claim, therefore, and desire to secure by Letters Patent, is—

The holding or rolling jacks H and the oscillating or vibrating stock F, substantially in the manner and for the purpose as described.

LE ROY S. WHITE. [L.S.]

Witnesses:

EDWARD M. BLISS,
JEREMY W. BLISS.