2 Sheets. Sheet 1.

O. W. Stow,

Seaming Machine.

No. 113,944. Patented Apr. 18. 1871.

Fig. 1.

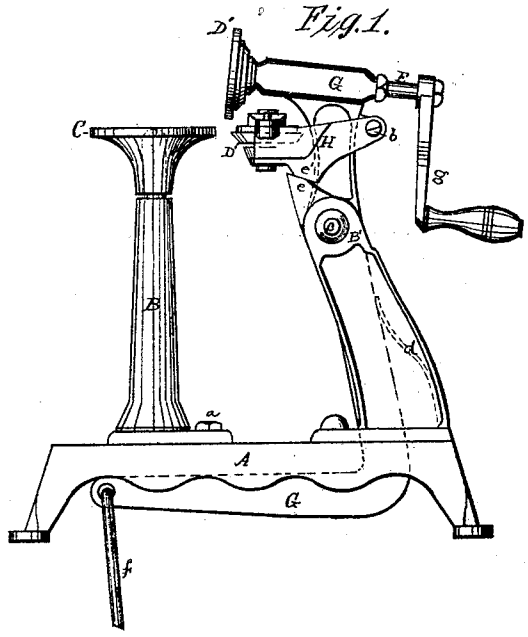
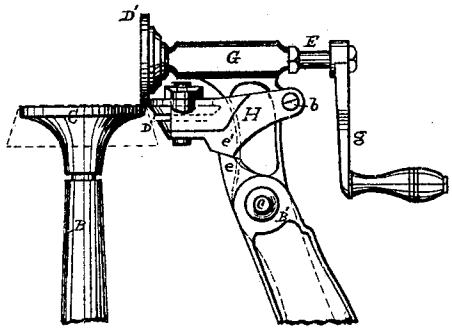


Fig. 2.



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O. W. Stow,

2 Sheets, Sheet 2.

Seaming Machine.

No. 113,944. Patented Apr. 18. 1871.

Fig. 3.

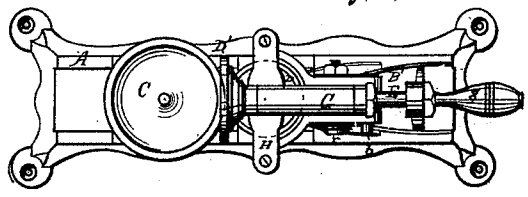
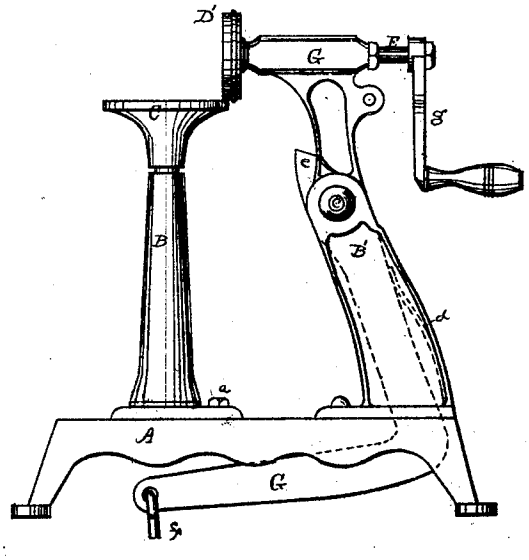


Fig. 4.



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United States Patent Office.

ORSON W. STOW, OF PLANTSVILLE, CONNECTICUT.

Letters Patent No. 113,944, dated April 18, 1871.

IMPROVEMENT IN SEAMING-MACHINES.

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

I, ORSON W. STOW, of Plantsville, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Double-seaming and Setting-down Machines, of which the following is a specification.

My invention is designed as an improvement in that class of tinsmiths' machines usually termed double-seaming and setting-down machines, and used for closing the seams of the bottoms of sheet-metal ware.

My invention consists in the combination and arrangement of the various parts, as hereinafter described.

In the accompanying drawing—

Figures 1, 2, and 4 are side elevations of a machine of my invention, and

Figure 3 a plan or top view of the same.

A designates the bed, to which is secured the standard B in such manner that, by means of a bolt and nut, *a*, the standard may be adjusted longitudinally upon the bed A, for the purpose of accommodating disks of varying sizes.

The disk C is placed upon the end of standard B in such manner that it is free to revolve upon the same.

D D′ are ordinary "setting-down" and "double-seaming" rollers, the roller D′ being secured to the shaft E, and, as usual in tinsmiths' machines, is removable, so that a similar roller or rollers having a periphery of other forms may be secured to the same shaft, when desired.

The shaft E revolves in bearings at the upper end of the knee-lever G.

The roller D is fitted to freely revolve in frame H, which frame H is pivoted by shaft *b*.

The knee-lever G works in a slot in the standard B′, and is hinged upon the shaft *c*.

On the inside of the standard B′ is a spring, *d*, indicated by broken lines, which spring, by its action upon the knee-lever G, throws the roller D′ upward, as shown in fig. 1.

Upon the upper end of the standard B′ is a projection, *e*, the top of which projection is inclined, and on the under side of the frame H is a similar projection, *e′*.

The operation is as follows:

The ware to be "seamed," after having its edges turned over or "burred," and the bottom hooked or sprung upon its sides in the usual manner, is placed, one article at a time, in an inverted position upon the disk C, as shown by broken lines in fig. 2.

By means of a foot-lever or other mechanism connected to the rod *f* the knee-lever G is swung upon its shaft *c*.

The shaft *c* is placed at an angle of substantially forty-five degrees to the intersecting point formed by the lines of the upper face of disk C and the front face of roller D′; therefore, the motion of the lever G causes the roller D′ to move forward and downward on an oblique curve to the disk C, while the roller D, by means of the frame H resting on the inclined projection *e*, has its working surface brought level with the top of disk C, as shown at fig. 2.

By means of the crank *g* the shaft E is revolved, when the operation of the rollers will set down the seam, as in the ordinary machine, the difference between my invention and the ordinary setting-down machine being in the manner of hanging the rollers in the frame, and that the disk C is not usually employed in said machines.

After setting down the seam of the ware the roller D′ is removed from the shaft E, and by removing the shaft or pin *b* the frame H and its roller D can also be removed, when a similar roller, D′, having its periphery beaded, is placed upon the shaft E, the remaining parts of the machine all being the same as before described, and shown by themselves in fig. 4, sheet 2.

The ware which has had its seam set down, as before described, is again placed upon the disk C and motion imparted to the roller D′, when the seam, by the action of the said roller and disk, is neatly turned down upon the side of the article operated on.

In ordinary double-seaming machines the roller D′ is brought downward by means of a crank-screw, and (with the exception of L. T. Hulbert's machine, patented January 3, 1860) is brought downward to the disk in substantially a vertical line.

By my invention the machine is operated in a much more convenient manner than by a crank-screw, and by simply changing the rollers (which change is quite common in several classes of tinsmiths' machines) and removing certain parts, a single machine is made to perform the work usually done by two separate machines.

The arrangement of the frame H and lever G or equivalent device for moving the frame, as described, causes the rollers D D′ to move away from each other as well as away from the disk C, whereby the work is conveniently placed in the machine and the rollers readily brought into position for action upon the same.

I claim as my invention—

1. The combination of the roller D′, shaft E, knee-lever G, shaft *c*, standard B′, bed A, standard B, and disk C, substantially as and for the purpose described.

2. The combination of the rollers D D′, snaft E, ever G, frame H, inclined planes or projections *e e′*, standard B′, and bed A, all combined and operating together, substantially as and for the purpose described.

3. The combination of the rollers D D′, shaft E, lever G, frame H, inclined projections *e e′*, standard B′, bed A, standard B, and disk C, substantially as and for the purpose set forth.

ORSON W. STOW.

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