

United States Patent Office.

C. O. CROSBY, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 86,819, dated February 9, 1869; antedated February 3, 1869.

IMPROVEMENT IN MACHINE FOR SCOURING NEEDLES.

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, C. O. CROSBY, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Process for Scouring Needles; 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 side view, and in

Figure 2, a transverse sectional view.

This invention relates to an improvement in process for scouring needles, that is, the first operation after they have been tempered.

This has heretofore been done by bundling the needles, and placing several bundles upon a table, beneath a heavy reciprocating plate, which, moving back and forth, rolls the bundle.

This apparatus is necessarily a large, cumbersome machine, requiring considerable power to operate it.

By my invention, the use of the reciprocating plate is entirely avoided, and a comparatively small machine substituted for the old machine; and

The invention consists in the arrangement of several rolls, their axes parallel to each other, arranged so that the several rolls bear upon the bundle, and revolve in the same direction, thus keeping the bundle in constant rotation, and borne upon at at least three points, thus increasing the effect of the operation.

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

A and B are two rolls, or cylinders, supported in proper bearings, in a frame, F, of any suitable construction.

Above the two rolls A and B, a third roll, C, is hung in a frame, D, the said frame D pivoted at *a*, so that the roll D may be raised or lowered, as occasion may require.

From a driving-shaft, E, arranged in any convenient

manner, power is communicated to the several rolls, or cylinders, so as to cause them to revolve in the same direction, as denoted by the arrows.

The needles are bundled in the usual manner; that is to say, about five hundred thousand tempered needles are placed in layers upon canvas, or other suitable material, with quartzose, sand, or other suitable material, interstratified between the layers, and upon the mass is poured suitable oil, then the whole rolled tightly into a bundle, and bound with cords.

This bundle, represented at *d*, is placed upon the lower rolls, and the upper roll dropped thereon, then power applied to cause the rolls to revolve, as before described, which keeps the bundle in constant revolution over the pressure of the upper roll.

This pressure may be graduated by the addition of extra weights, until the proper pressure is attained.

This constant revolution produces the same result, that is, to scour the needles, which has heretofore been performed by the plate and table, as before described.

The rolls may be of sufficient length to take in several bundles, if desired; and if necessary or desirable to reverse the motion, so that the bundle may be rolled for a time in one direction, and then in the other, this may be done by any of the known devices for reversing the power.

I have represented but three rolls. It will be seen, however, that more may be used, and as many rolls as can be brought to bear upon the bundle increase the effect.

Having thus fully described my invention,

What I claim as new and useful, and desire to secure by Letters Patent, is—

The process herein described, for scouring needles by the employment of revolving rolls, supporting and bearing upon the bundle, substantially in the manner herein set forth.

C. O. CROSBY.

Witnesses:

J. H. SHUMWAY,

A. J. TIBBITS.