

IRA MANNING,  
Improvement in Manufacture of Tension-Wheels  
for Sewing-Machines.

No. 128,051.

Patented June 18, 1872.

FIG 1



FIG 2

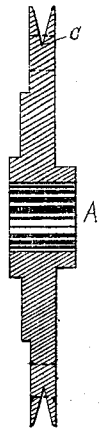
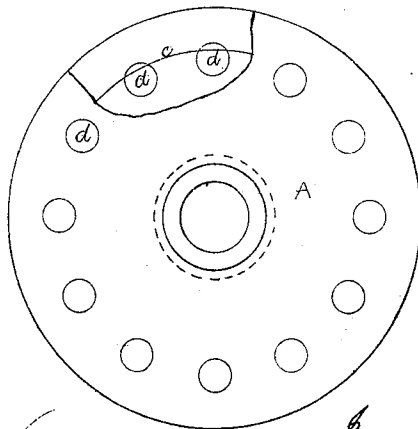


FIG 3



WITNESSES

*Charles F. Van Horn*  
*Geo. J. [unclear]*

INVENTOR

*Ira Manning*  
*by Francis D. Pastorius*  
*his Atty in fact*

# UNITED STATES PATENT OFFICE.

IRA MANNING, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN THE MANUFACTURE OF TENSION-WHEELS FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 128,051, dated June 18, 1872.

Specification describing certain Improvements in the Tension-Wheel of a Sewing-Machine, invented by IRA MANNING, of the city and county of Philadelphia and State of Pennsylvania.

The improvements relate to casting or otherwise making the tension-wheel of a sewing-machine in one piece, and afterward pressing or forcing the same for the purpose of finishing the thread-groove.

Figures 1 and 2 are enlarged sectional views. Fig. 3 is an enlarged side view.

The wheel A is formed or cast in a single piece. A V-shaped groove is cut in its rim, and afterward placed in a press or other suitable machine and pressed or forced until the angle *c* of the V becomes extremely fine and knife-edge like, as shown at Fig. 2. Heretofore it has not been possible to cut a V-groove in a solid tension-wheel, and at the same time make its angle *c* sufficiently sharp to pinch the thread, and thereby cause the necessary tension. Cutting-tools might be made with points of sufficient fineness and durability to cut a groove for the coarser grades of thread,

but for fine silk or cotton it is practically impossible. After the groove has been completed it can be freed of dirt or deposit by openings *d*, Fig. 3, the peripheries of which cut or break, at intervals, the angle *c*. The angle or bottom of the V-shaped groove *b* is shown by the line *e*; the peripheries of the openings *d* project slightly above it. The sliding of the thread carries all deposit into these openings and keeps the groove free of dirt.

I claim as my invention—

The improved method, herein described, of making tension-wheels for sewing-machines—that is to say, casting or otherwise constructing the wheel of one piece of metal, then forming in it a V-groove, and then forcing together the walls of said groove to diminish the angle between them, as and for the purpose specified.

In testimony whereof I hereunto sign my name.

IRA MANNING.

Witnesses:

FRANCIS D. PASTORIUS,  
JOHN YILLE.