
Charles D. Belcher, Of Charleston, South Carolina.

Improvement in Sewing-Machines.


To all whom it may concern:
Be it known that I, Charles D. Belcher, of Charleston, in the district of Charleston and State of South Carolina, have invented a new and useful Improvement in Sewing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form part of this specification:

Figure 1 being a side elevation of a sewing-machine provided with my improvement; Fig. 2, a plan of one end of the machine, the cloth-plate being removed; Fig. 3, a vertical section in the plane indicated by the line x x, Fig. 2; Fig. 4, a vertical section in the plane indicated by the line y y, Fig. 2.

Like letters designate corresponding parts in all the figures.

The object of my invention is intended as an improvement upon the sewing-machine described in the specification of Letters Patent granted to the assignees of A. B. Wilson, and bearing dates, respectively, the 15th day of June, 1852, and the 19th day of December, 1854. All the parts of the machine, except that to which my improvement directly relates, are the same as specified in said Letters Patent, and need not be again described here. The principal fault in the use of Wilson's sewing-machine lies in the imperfect means by which the loop of the needle-thread is held from slipping from the revolving hook and kept extended till the proper moment. Hitherto that has been accomplished by means of a yielding or elastic brake pressing continually against the periphery of the revolving hook, and the release of the loop has been effected by the receding of the surface of said hook at the proper place. This brake is generally made of leather, and has no movement. The objections to it arise, first, from the imperfect manner in which it holds the thread, requiring a different thickness with every variation in the size of the thread, and often causing the thread to break by wedging under the brake, or allowing the thread to pass by when it is not just right; second, from its want of durability, requiring to be taken out and replaced frequently several times a day; third, from the trouble and necessity required in replacing.

My invention entirely obviates all the above objections; and it consists in the applica-
feeding-bar I, and depress it by means of a very slight separate spring, p, applied as shown in Fig. 4. This obviates both the objection to the first-mentioned mode, which is that the force of the elastic shank of the tongue is much greater than desirable, thus increasing the force required to drive the machine, and also to the last-mentioned mode, in which the feeding-tongue often fails to disengage itself from the cloth by its simple weight.

What I claim as my invention, and desire to secure by Letters Patent, is—

The improvement on the patents of A. B. Wilson herein described, consisting in the application of an unyielding brake to hold the loop upon the revolving hook, and imparting a positive movement thereto in such a manner as to separate it from and bring it to the periphery of the hook at the proper moments, substantially as herein specified.

The above specification of my new and improved sewing-machine signed this 28th day of November, 1856.

CHAS. D. BELCHER.

Witnesses:

J. S. BROWN,

RUFUS F. OSGOOD.