A. J. FISK.

Spring-Setting Machine.

No. 165,087. Patented June 29, 1875.

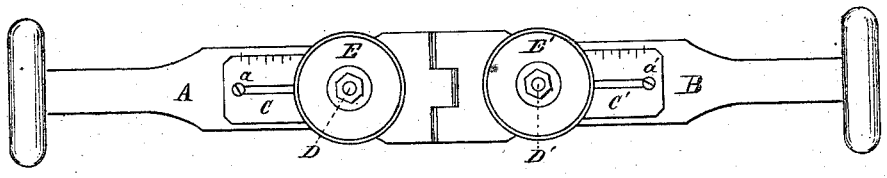

Fig. 1.

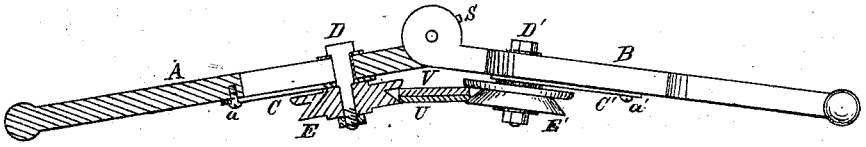

Fig. 2.

Witnesses:

Jas. McNaughton

John. H. Campbell

Inventor.

Asa J. Fisk

by Humphrey & Stuart

his Attorneys.

UNITED STATES PATENT OFFICE.

ASA J. FISK, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT TO HENRY H. RUGG, OF SAME PLACE.

IMPROVEMENT IN SPRING-SETTING MACHINES.

Specification forming part of Letters Patent No. **165,087**, dated June 29, 1875; application filed May 20, 1875.

To all whom it may concern:

Be it known that I, ASA J. FISK, of Akron, in the county of Summit and State of Ohio, have invented an Improved Spring-Setting Machine, of which the following is a specification:

The object of my invention is to rapidly and accurately fit or set the outer leaves of carriage-springs, while hot, to the long inner leaf, after the latter shall have been bent to the desired shape, by means of grooved steel rollers, arranged to approach each other and firmly grasp in the grooves the edges of the cold and hot leaves of the spring, while the machine is caused to traverse the length of the spring, compressing the hot leaf against the cold one.

In the manufacture of such springs the long inner leaf is first bent, by hammering or other method, to the desired curve. It is then, when cold, placed upon a suitable table with the concave side downward, the center supported by an upright post, and the ends sprung downward beyond the natural position of the spring and attached to the table. The next leaf is then, while red hot, placed thereon, and, by means of pinchers or bending-tongs, bent down to conform to the shape of the long leaf.

My invention is fully shown in the accompanying drawing, wherein Figure 1 is a plan, and Fig. 2 a side view, of my spring-setting machine, a portion thereof being shown in section, and also illustrates the operation of the same.

A B are two levers, terminating in suitable handles at their outer ends, and connected by a hinge-joint. In each lever is a slot, through which passes a bolt, D D′, which holds in place and forms a journal for the grooved wheels E E′, these latter preferably made of hardened steel. The object of the slot is to allow the space between the wheels to be adjusted to the width of the spring. The slotted plates C C′, held by screws *a a′*, are also used to regulate this space, by holding the wheel in place while tightening the bolts D D′, and may be graduated, as shown, to facilitate the object. For convenience, a stud, S, prevents the machine from folding, allowing only enough motion to accomplish the desired end.

To use the machine, one handle is taken in either hand, the wheels downward, and the proper distance apart. The first leaf being in position, the hot leaf is placed thereon. The machine is then held crosswise over the spring, and the handles bent down until the grooved wheels grasp the edges of the two springs, as shown in Fig. 2, wherein U is a cross-section of the long leaf, and V of the hot leaf. The machine is then moved rapidly from end to end of the hot leaf, pressing it to place.

I claim as my invention—

The combination of jointed levers A and B with adjustable grooved wheels E E′, substantially as described, whereby the said wheels are caused to approach each other by moving the levers toward each other, as and for the purpose specified.

ASA J. FISK.

Witnesses:

C. P. HUMPHREY,

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