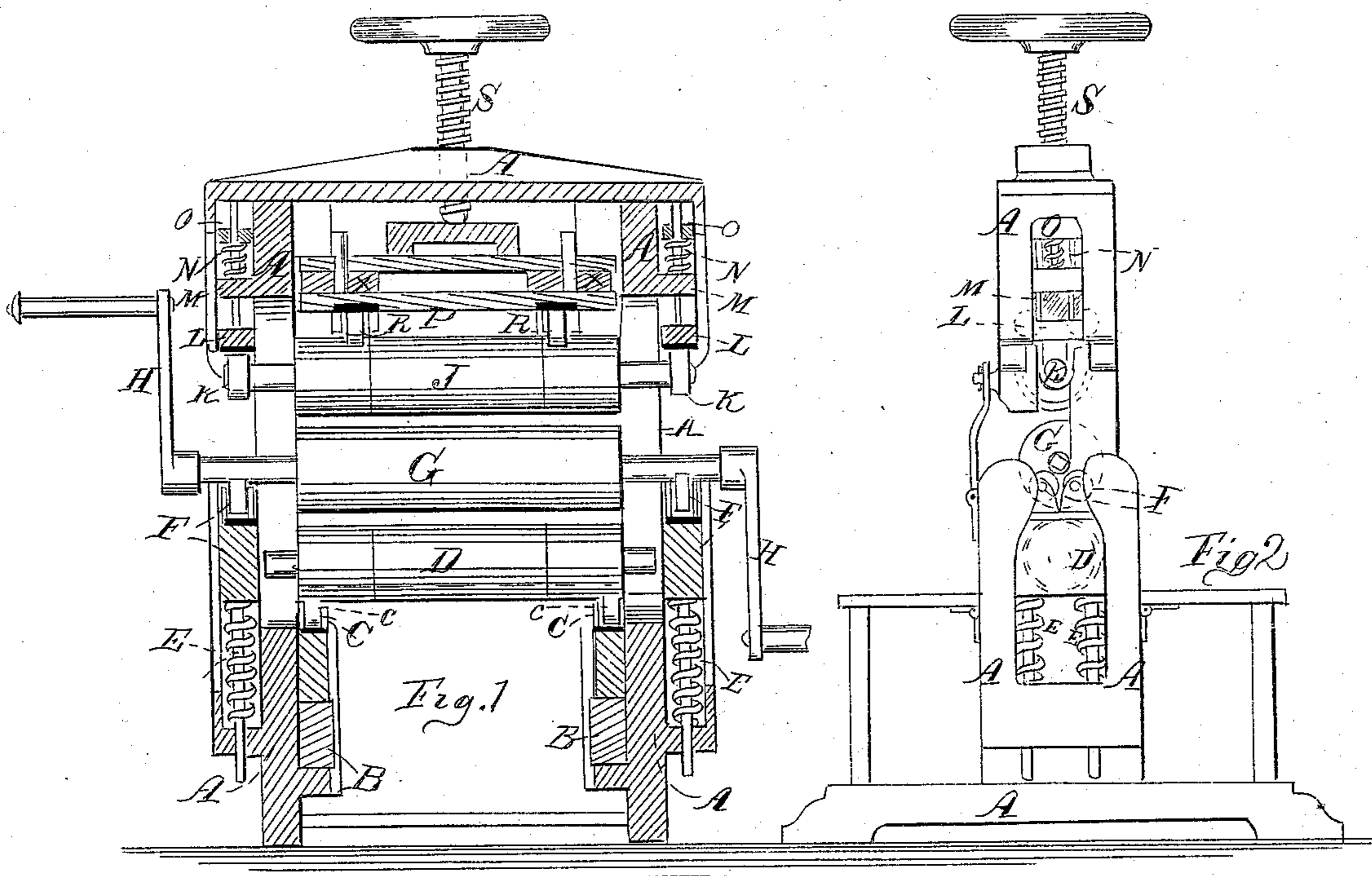


N. Soderstrom,

Mangle.

No. 93491.

Patented Aug. 10. 1869.



Witnesses:
W. S. Sprague
W. F. Overt

Inventor:
N. Soderstrom
per Atty.
W. S. Sprague

United States Patent Office.

NICOLOUS SODERSTROM, OF CHICAGO, ILLINOIS.

Letters Patent No. 93,491, dated August 10, 1869.

IMPROVED MANGLE.

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

To whom it may concern:

Be it known that I, NICOLOUS SODERSTROM, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful Improvement in Mangles; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a front view of my invention, partly in section, and

Figure 2 is an end view.

Like letters indicate like parts in each figure.

The nature of this invention relates to an improvement in mangles; and consists in the peculiar arrangement of the rollers one above the other, working upon proper friction-wheels, the whole being regulated by screw from the top.

By the use of spiral and India-rubber springs, a great degree of elasticity is given to the pressure of the rollers, whereby clothes are smoothed uniformly, and by the same means a much greater pressure may be employed without danger of tearing clothes than by ordinary methods, in consequence of which the work of mangling is performed more nicely.

In this device, also, such a pressure may be brought upon the rollers that the clothing, which is first wound around the central roller, detached for that purpose, may, by the use of the friction-wheels, enabling motion to be given to the rollers under very great pressure, be smoothed by a few revolutions without unwinding the clothes from the roller, as it is usually done, and in this way the work is performed more expeditiously than by other methods.

A, in the drawings, represents a proper frame, into which is placed the mechanism hereinafter described.

B are rubber springs, surmounted by blocks, which carry the friction-wheels C.

D is the lower smoothing-roller, which rotates freely upon the same.

E are coil-springs, suitably attached to the frame, and support the blocks and friction-wheels F, which same form bearings for the outer ends of the shaft of

the roller G, said shaft being provided at either end with crank-handles H.

This roller G can be removed from the machine at will.

J is the upper smoothing-roller, whose bearings are at K, in any suitable journals or boxes, which are secured to the sliding block L.

M are stationary blocks, which support the spiral springs N, that are surmounted by the blocks O, the whole being connected by proper rods.

P is a block, upon the under side of which are attached the friction-wheels R, which same are kept in contact with the periphery of the roller J, by the rubber spring *x*, between the blocks P and the follower of the screw S, the tension of the springs and the pressure exerted on the fabric by the rolls being regulated by said screw.

T are table-leaves, hinged to the frame A.

To operate this invention, remove the roller G from the frame, and wind upon it the article to be smoothed. Then place it in its proper position, as shown, and by a few revolutions of the rolls, the article being smoothed is ready to be removed.

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

The combination of the roller J, provided with bearings K, sliding block L, spiral springs N, stationary block M, block O, screw S, India-rubber springs *x*, block P, and friction-wheels R, with the roller G, provided at either end with crank-handles H, and rotating upon friction-wheels F, and with the roller D pivoted in bearings, which support friction-wheels F, and rest upon spiral springs E, which in turn rest upon a suitable block, and rotating upon friction-wheels C, pivoted upon a suitable block, resting upon India-rubber springs B, which in turn rest upon a suitable block, and with the hinged table-leaves T, all in connection with frame A, constructed and arranged as and for the purposes above set forth.

N. SODERSTROM.

Witnesses:

H. L. SPRAGUE,
H. F. EBERTS.