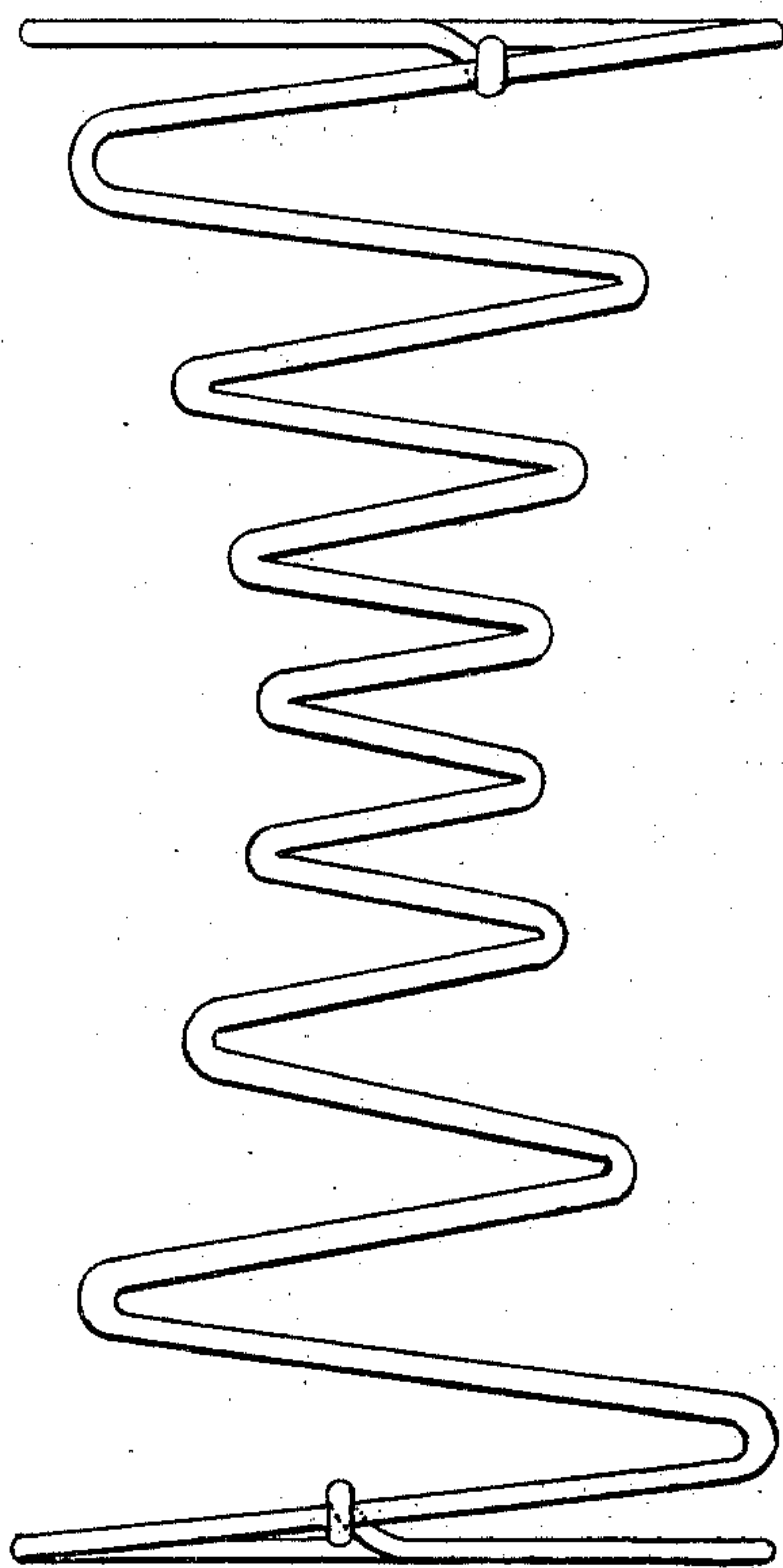


*J. J. Eagleton,
Furniture Spring.*

No. 122,001.

Patented Dec. 19, 1871.



*Witnesses,
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G le leottor*

*Inventor:
J. J. Eagleton
per Murray &
Attorneys*

UNITED STATES PATENT OFFICE.

J. JOSEPH EAGLETON, OF NEW YORK, N. Y.; SARAH N. EAGLETON, ADMINISTRATRIX, ASSIGNOR TO EAGLETON MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN JAPANNED FURNITURE-SPRINGS.

Specification forming part of Letters Patent No. 122,001, dated December 19, 1871.

To all whom it may concern:

Be it known that I, J. JOSEPH EAGLETON, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Furniture-Springs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which the drawing represents a furniture-spring provided, according to my improvement, with a japan covering.

The helical springs heretofore employed for furniture-seats, mattresses, &c., have generally been made of iron wire, brass or copper; but steel wire, although a far superior material for such springs, has not been commonly employed, owing to the lack of means for protecting such springs from corrosion and the lack of means for imparting to them the necessary stiffness or temper.

The object of this invention is to produce steel furniture-springs that shall not only be protected from corrosion, but shall also be suitably tempered and stiffened.

The drawing is a perspective view of one of my improved springs.

In carrying out my invention I provide a suitable quantity of steel wire of the size of which the spring is to be made, and this I wind upon blocks in the usual manner, giving the wound spring the ordinary pressing or set. I then provide a suitable bath containing the ordinary preparation of japan varnish, in which I dip or place the springs so as to cover them with the japan. They are then removed and strung on wires or put on pegs to drain, after which they are placed in a baking-oven of the ordinary kind suitable for the baking of japanned articles, in which oven the springs are subjected to a temperature sufficient to bake and harden the japan; after which the springs are removed from the oven and allowed to cool, when they are ready for use.

The treatment of the springs in this manner imparts to them two important and valuable qualities: First, the springs, when they come from the oven and are cooled, have firmly attached to their exterior surface a water-proof covering or coating, which perfectly protects them from corrosion and fits them for service in all kinds of climates, hot or cold, dry or damp. Second, the springs thus prepared are strengthened or stiffened, the application of heat to the springs in the oven having the apparent effect to temper the steel of which they are composed, making the springs stronger and more elastic. As between a steel spring not japanned as I have described and a steel spring japanned as described, both being of the same size and made from the same piece of wire, the japanned spring will be found to be much stronger than the spring not japanned. The spring not japanned is therefore not only lacking in strength, but it is also practically useless for want of a protecting covering. But the improved article produced substantially in the manner I have described forms a strong and durable spring, and no article like it has, so far as I am aware, ever been known or used.

While I do not claim, broadly, the making of furniture-springs of steel wire, I wish it to be understood I do not limit or confine myself to the exact order or method of operation here described in producing my improved springs, as the order or method may be varied without departing from my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The method herein described of strengthening metal springs.
2. As an improved article of manufacture, a spring made substantially as herein described.

J. J. EAGLETON.

Witnesses:

FRANK BLOCKLEY,
ALEX. F. ROBERTS.

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