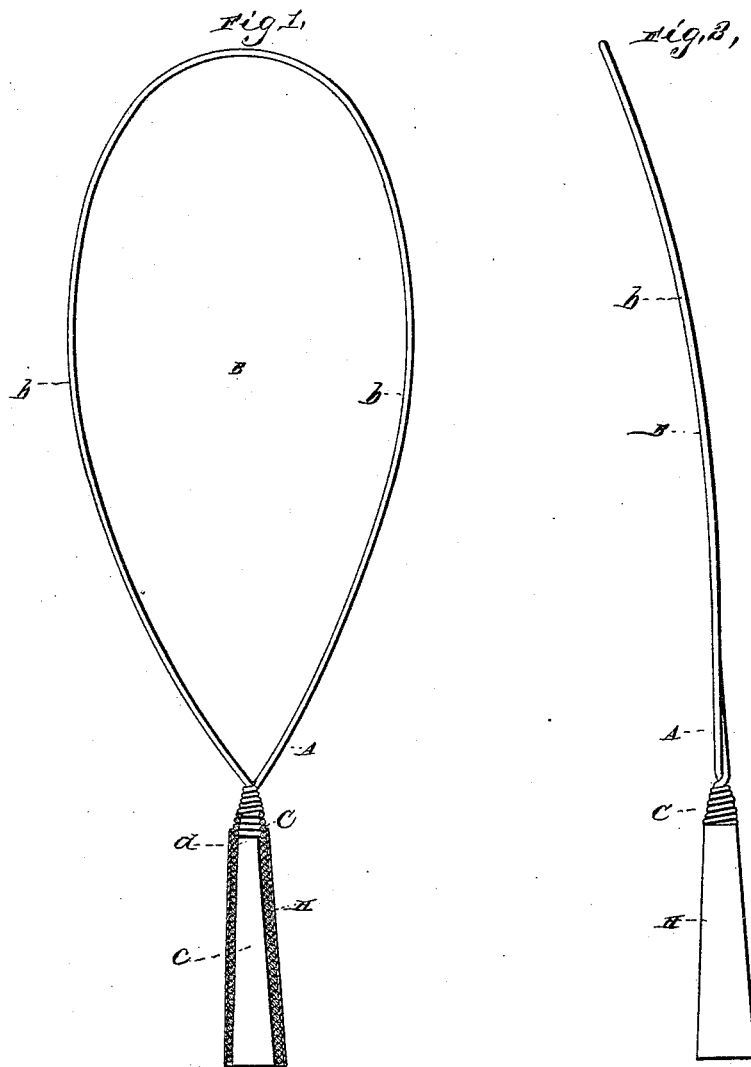


(No Model.)

R. E. ZIMMERMANN.  
CARPET BEATER.

No. 458,090.

Patented Aug. 18, 1891.



WITNESSES:

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INVENTOR

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# UNITED STATES PATENT OFFICE.

ROBERT E. ZIMMERMANN, OF BEAVER FALLS, PENNSYLVANIA.

## CARPET-BEATER.

SPECIFICATION forming part of Letters Patent No. 458,090, dated August 18, 1891.

Application filed April 8, 1891. Serial No. 388,099. (No model.)

### *To all whom it may concern:*

Be it known that I, ROBERT E. ZIMMERMANN, a citizen of the United States, and a resident of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Carpet-Beaters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a plan view with the handle in vertical section. Fig. 2 is a side view.

This invention has relation to carpet-beaters; and it consists in the novel construction thereof, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter A designates a piece of flexible wire having its intermediate portion bent to form the oblong, oval, or egg-shaped loop B. The sides *b b* of the loop are preferably at their central portions slightly curved upward from the horizontal plane thereof, as shown. The ends of the wire are brought together and intercoiled or twisted upon each other to form the handle portion C, extending in the horizontal plane of the loop. In this hollow coil is placed a solid core *c*, of suitable material, for the purpose of giving the necessary stiffness to the handle. This core terminates short of the beginning of the coil, as shown at *d*, in order to permit an elastic movement of the handle when the loop is brought into contact with the material of the article being beaten. The outer surface of the coil is provided with a partial smooth covering H, of suitable material, to

allow it to be grasped without injury to the hand.

It will be seen that by forming the handle of the same piece of wire with the loop an additional spring or elasticity is given the loop, which will greatly increase its effectiveness in use. I have found the egg-shaped loop, as shown, to be the most effective form, although it may be, if desired, of any other shape.

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

1. The carpet-beater comprising the wire bent at its intermediate portion to form the egg-shaped loop, the sides of which are curved out of the horizontal plane thereof, the end portions of said wire being intertwisted or coiled upon each other to form the flexible hollow-coil handle, substantially as specified.

2. The carpet-beater comprising the wire having its intermediate portion bent to form the single beating-loop and its ends intercoiled or twisted upon each other to form the hollow-coil handle, said coil having the solid core and the casing, substantially as specified.

3. The carpet-beater comprising the wire bent at its intermediate portion to form a single oval flexible loop, the sides of which are curved out of the horizontal plane thereof and united at their ends and intertwisted to form a hollow flexible coil, a stiffener in said coil, and a covering therefor, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT E. ZIMMERMANN.

Witnesses:

S. WALLACE MILLER,  
G. L. EBERHART.