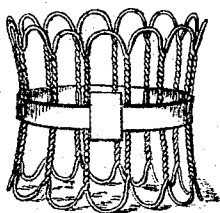


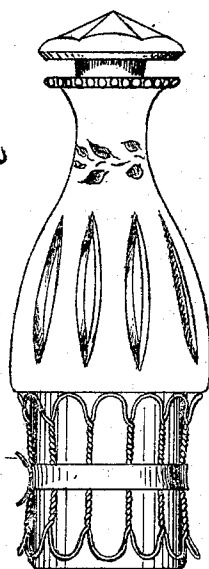
Charles W. Goodhue
 — Improved Wire Blank —
 for Holders, Napkin Rings Etc.

Assignor to
 Woods Sherwood & Co

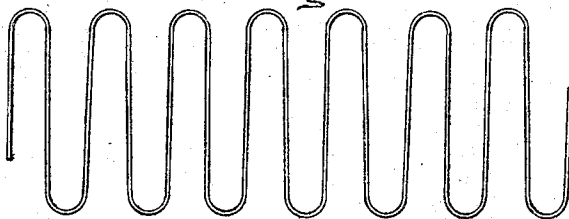
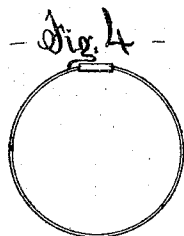
— Fig 5 —
 117272



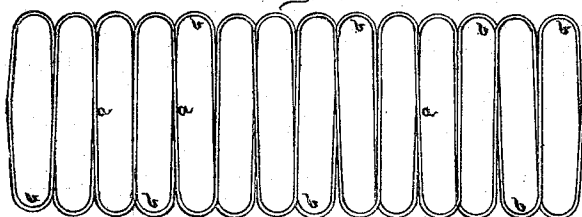
— Fig 6 —



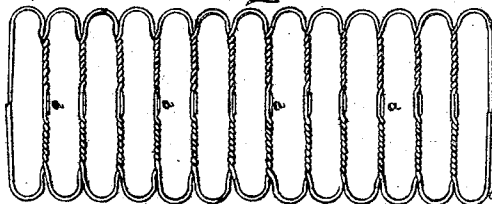
— Fig 1 — PATENTED JUL 25 1871



— Fig 2 —



— Fig 3 —



Charles W. Goodhue
 Inventor
 Edward J. [Signature]
 Robert H. [Signature]
 Witnesses.

UNITED STATES PATENT OFFICE.

CHARLES W. GOODHUE, OF LOWELL, MASSACHUSETTS, ASSIGNOR TO EDWARD P. WOODS, DANIEL SHERWOOD, AND CYRUS H. LATHAM, OF SAME PLACE.

IMPROVEMENT IN WIRE BLANKS FOR NAPKIN-RINGS, CRUET-HOLDERS, &c.

Specification forming part of Letters Patent No. 117,272, dated July 25, 1871.

To all whom it may concern:

Be it known that I, CHARLES W. GOODHUE, of Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in the Manufacture of Wire Blanks for making articles for domestic use.

My invention consists in a novel manner of forming wire blanks for articles of domestic use, such as napkin-rings, cups for casters, holders for bottles, &c.; and the invention has for its object a cheap, simple, and highly ornamental article for the table or toilet-stand.

Figure 1 illustrates the form in which the wires for the blanks are bent. Fig. 2 represents the wire blank before it is twisted. Fig. 3 represents the blank after being twisted. Fig. 4 is a view of the band used in constructing a napkin-ring from the blank. Fig. 5 is a view of a napkin-ring, and Fig. 6 is a view of a bottle-holder, both formed of a twisted blank.

For the purpose of illustrating my invention, I select and describe it as used in the construction of a napkin-ring, from which its use for other purposes will be readily understood by persons skilled in the art to which it applies.

The wire is cut of the desired length and bent over pins placed at regular distances apart to form the part, Fig. 1: Two of these bent wires are laid together to form the blank, Fig. 2. This blank is placed in a machine composed principal-

ly of a series of pinions held in suitable bearings and driven by a rack; each pinion has a narrow slot in it extending radially from its center into which the center *a* of the straight portions of the wire blank is pressed. The curved portions *b* of the blank are held true and in place by a series of pins arranged upon each side of the rack and pinions and so constructed as to move forward regularly toward each other as the wire becomes shortened under the operation of twisting.

When the blank is placed in this machine it is quickly and perfectly twisted by the movement of the rack driving the twisting-pinions. After the blank is removed from the machine it is bent to the required shape around a mandrel, and the ends are twisted together to form the cylinder. The band, Fig. 4, is placed around the center to cover the untwisted portions *a*, and the ring is then ready to receive its coating of tin or other metal by immersion in a bath, or otherwise.

I claim—

As a new and improved article of manufacture, the twisted-wire blank, Fig. 3, constructed substantially as described and specified.

CHARLES W. GOODHUE.

Witnesses:

L. A. MCARTHUR,
HORACE F. SLOCUM.