

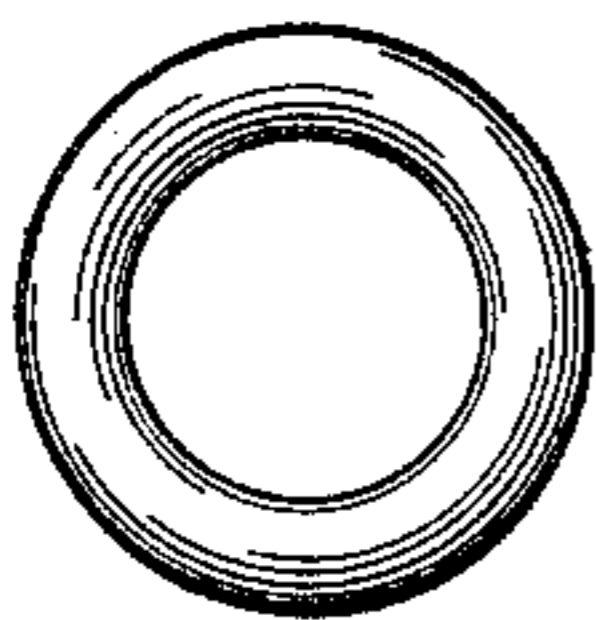
F. RICHARDSON.

MANUFACTURE OF PAPER CHAINS AND RINGS.

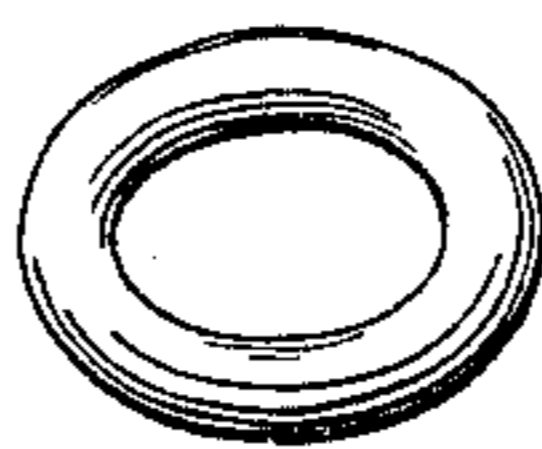
No. 176,481.

Patented April 25, 1876.

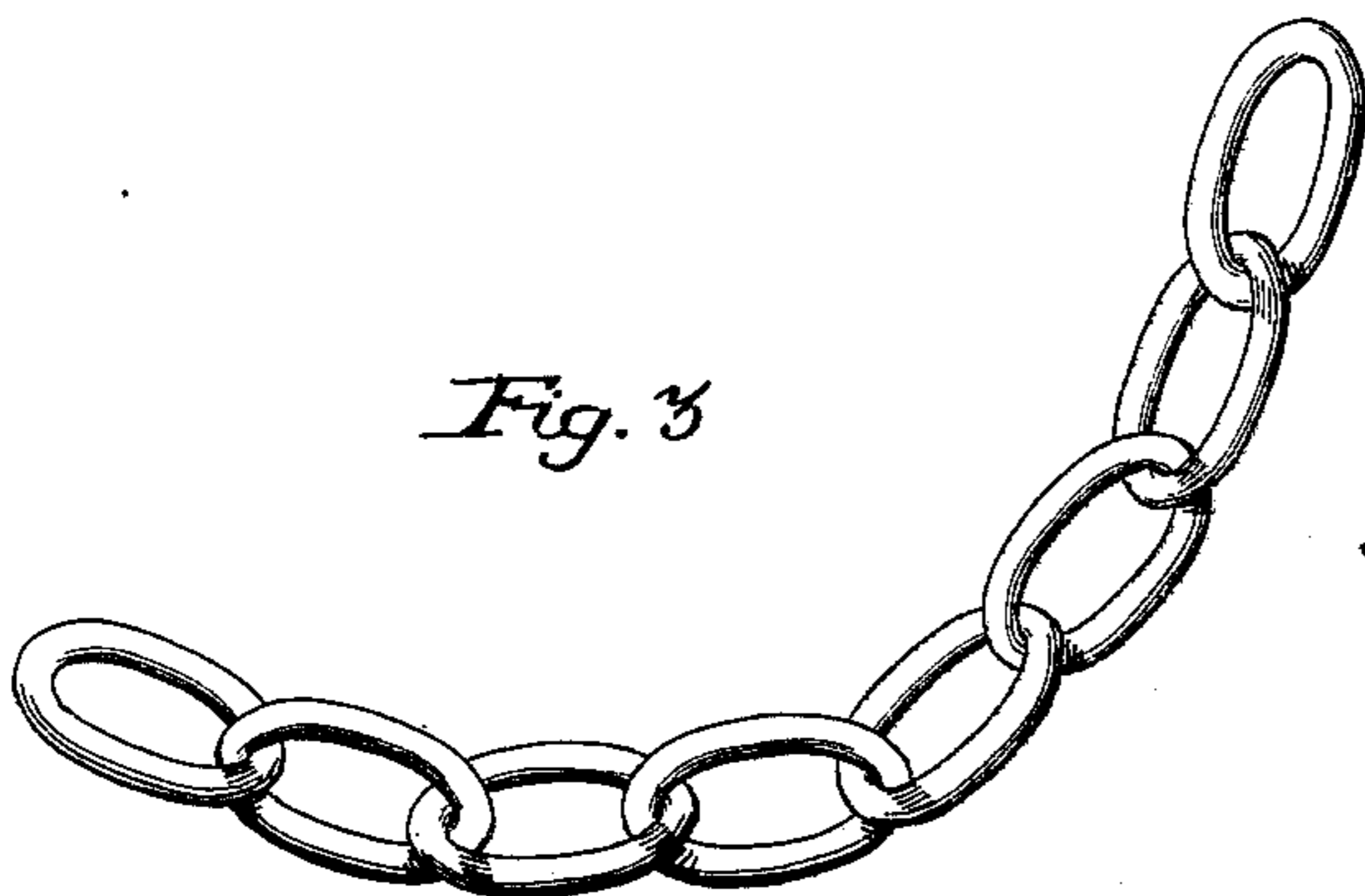
*Fig. 1*



*Fig. 2.*



*Fig. 3*



*Witnesses:*

*Walter B. Linant*

*J. F. Rich*

*Inventor:*

*Frederick Richardson*

# UNITED STATES PATENT OFFICE.

FREDERICK RICHARDSON, OF PROVIDENCE, RHODE ISLAND.

## IMPROVEMENT IN THE MANUFACTURE OF PAPER CHAINS AND RINGS.

Specification forming part of Letters Patent No. **176,481**, dated April 25, 1876; application filed August 5, 1875.

*To all whom it may concern :*

Be it known that I, FREDERICK RICHARDSON, of the city and county of Providence, in the State of Rhode Island, have made certain new and useful Improvements in the Manufacture of Ornamental Chains and Rings; and I do hereby declare that the following specification is a full, clear, and exact description thereof.

My invention, while it may be used in the manufacture of various other articles, is more especially designed for ornamental chains, martingale-rings, and other like rings, and consists in making them from paper and subsequently finishing the same all in the manner substantially as described.

In my invention I make use of an arbor of suitable size and shape, upon which I wind strips of thin tough paper, previously saturated with glue, until the requisite bulk is attained.

The paper is then slipped off from the arbor and while moist, and, after being cut into the desired lengths, is placed in a die of the shape

necessary to make the required link, ring, or other article, when it is pressed into a solid and hard mass, the die being so constructed that it will leave no burr upon the work.

In the case of a chain the alternate links are sawed open and afterward glued together.

After the chain or ring is completed it may be japanned or enameled in any desired color, or in imitation of shell, and thus finished up so as to present a neat and pretty appearance.

Chains and rings made from paper in this manner are not only stout but remarkably light in weight.

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

The herein-described method of making paper chain-links and rings by winding strips saturated with glue on an arbor, and then subjecting the material to pressure in a die, substantially as set forth.

FREDERICK RICHARDSON.

Witnesses:

WALTER B. VINCENT,  
J. T. RICH.