(No Model.)

T. ROBINSON.

RETICULATED OR OPEN WORK OF METAL BARS.

No. 383,250. Patented May 22, 1888.

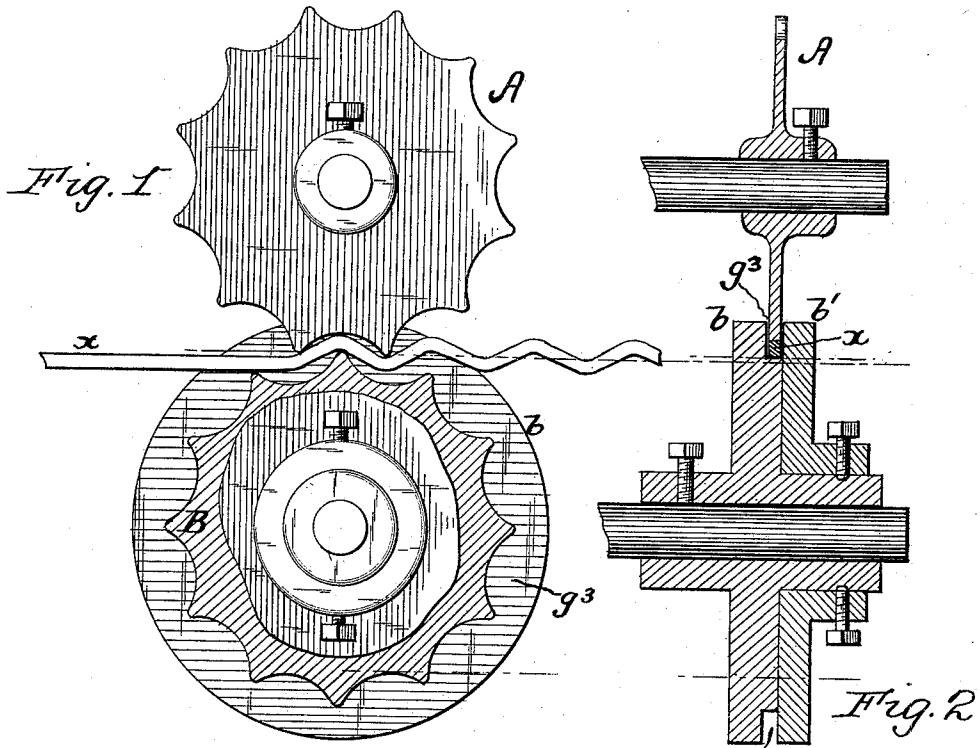


Fig. 1

Fig. 2

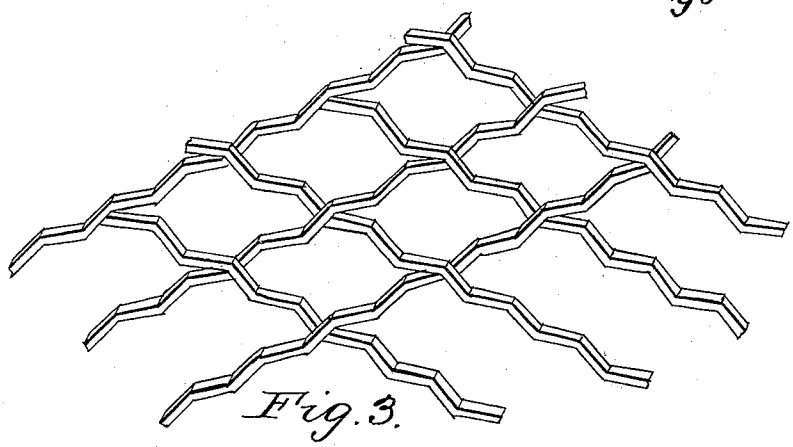


Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS ROBINSON, OF PHILADELPHIA, PENNSYLVANIA.

RETICULATED OR OPEN WORK OF METAL BARS.

SPECIFICATION forming part of Letters Patent No. 383,250, dated May 22, 1888.

Application filed August 3, 1887. Serial No. 246,032. (No model.)

To all whom it may concern:

Be it known that I, THOMAS ROBINSON, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Reticulated or Open Work of Metal Bars, of which the following is a specification.

My invention has relation to reticulated or open-work metal partitions, screens, guards, or fences made of crimped flat bars, or those which are oblong in cross-section. Heretofore these bars have been crimped on their flat sides and woven together to form the screen or guard or other article. Reticulated or open work so made is more or less weak, as it is too yielding, especially so when of large sections, as it then readily bends under pressure; so much so, that in many cases it does not resume its normal shape after being bent, and in others the bars are drawn from their end supports.

My invention has for its object to avoid said described objection or to make such reticulated work stiff and strong or practically unyielding when subject to pressure. To accomplish this result I crimp the bars on their edges, and to do this I run the bars through a special form of crimping-rollers, which prevents twisting of the bars as they are crimped, so as to keep or guide their edges always in an upright position for the crimping-rolls to engage with.

My invention accordingly consists of reticulated or open metal work composed of flat bars crimped on their edges and woven or otherwise connected together as desired, as hereinafter more particularly described and claimed.

Reference being had to the accompanying drawings, Figure 1 is an end view, partly sectional, showing a pair of crimping rollers or wheels embodying my improvements for crimping flat metal strips or bars on their edges in accordance with my invention; Fig. 2, a vertical longitudinal section of same; and Fig. 3, a perspective of a part of a screen, guard, fence, or other article composed of crimped-edge bars connected or woven together.

A indicates the upper crimping roller or wheel, which is made in the usual manner, and B the lower roll or wheel, having annular flanges b and b' on each side of the same, one of which flanges is removable from the wheel, and both project beyond the crimping teeth or lugs b^2, to form an annular groove or guide, g^3, for holding a flat metal bar, x, fed into said groove or guide between the crimping-wheels in a vertical position on one of its edges to keep it from torsionally twisting as it is crimped to bring its flat sides into contact with the rolls or wheels A B. These guides on roll or wheel B therefore admit of rapid and regular crimping of any length of bars or strips on their edges for use for reticulated work. Without these guides I have found it to be impossible to crimp the bars on their edges, as the bars twist torsionally and gradually bring their flat sides to the crimping-wheels.

A section of a screen, guard, or railing made from edge-crimped bars, as described, is exceedingly firm and rigid, and is unyielding when subject to pressure, and in practice I have found it to be a more desirable guard or fence section than those composed of bars or strips twisted on their flat sides.

The guards, fences, or other articles may be of any desired configuration or design.

I do not herein claim the crimping rollers or machine described and shown, as the same will form the subject-matter of a separate application.

What I claim is—

1. A guard, fence-section, or screen composed of metal edge-crimped flat bars or strips woven or connected together, substantially as set forth.

2. Reticulated or open work composed of edge-crimped flat bars connected together, substantially as set forth.

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

THOMAS ROBINSON.

Witnesses:
CHAS. F. VAN HORN,
S. J. VAN STAVOREN.