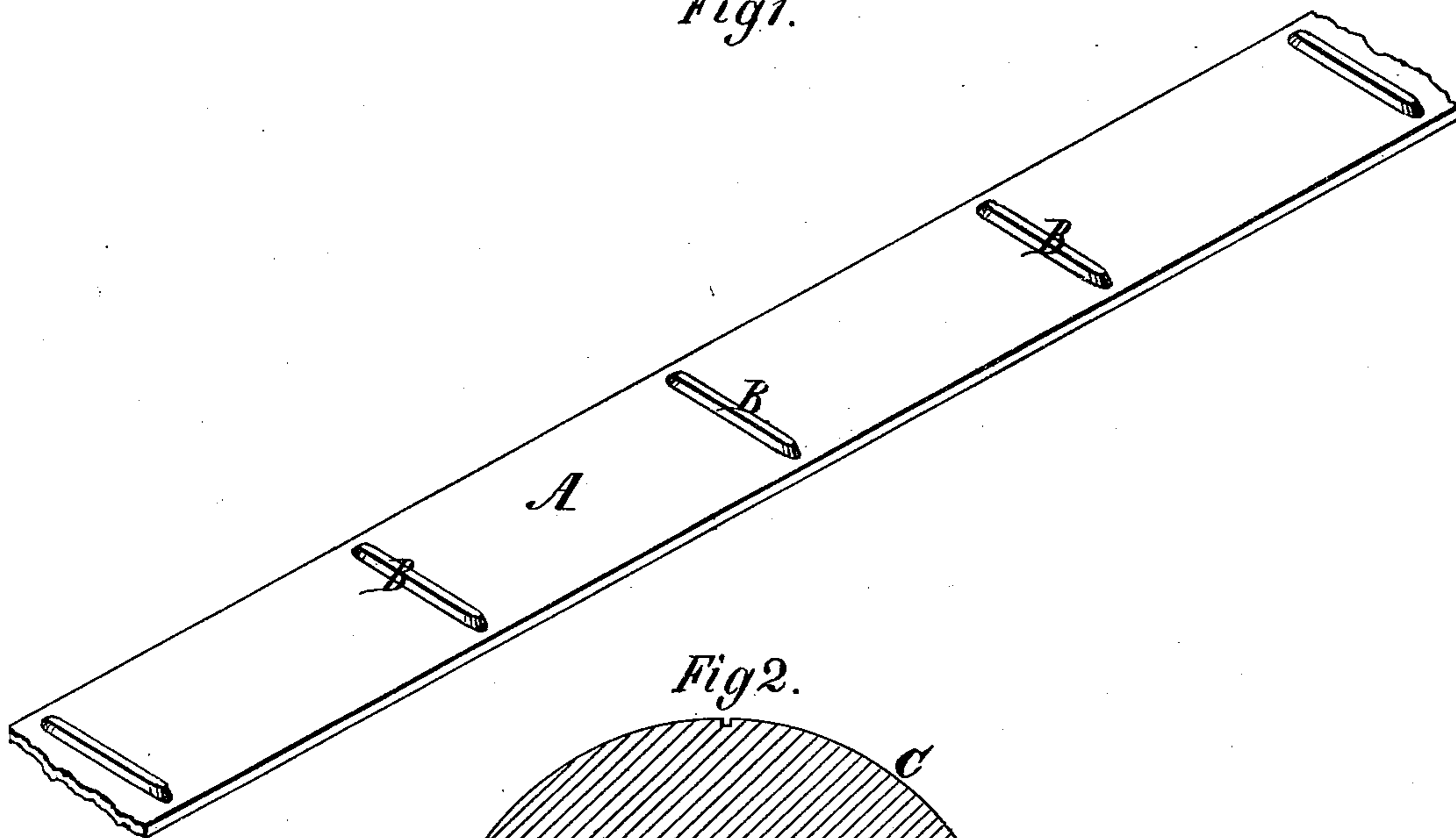


W. B. HAYDEN.  
BALE HOOP IRON.

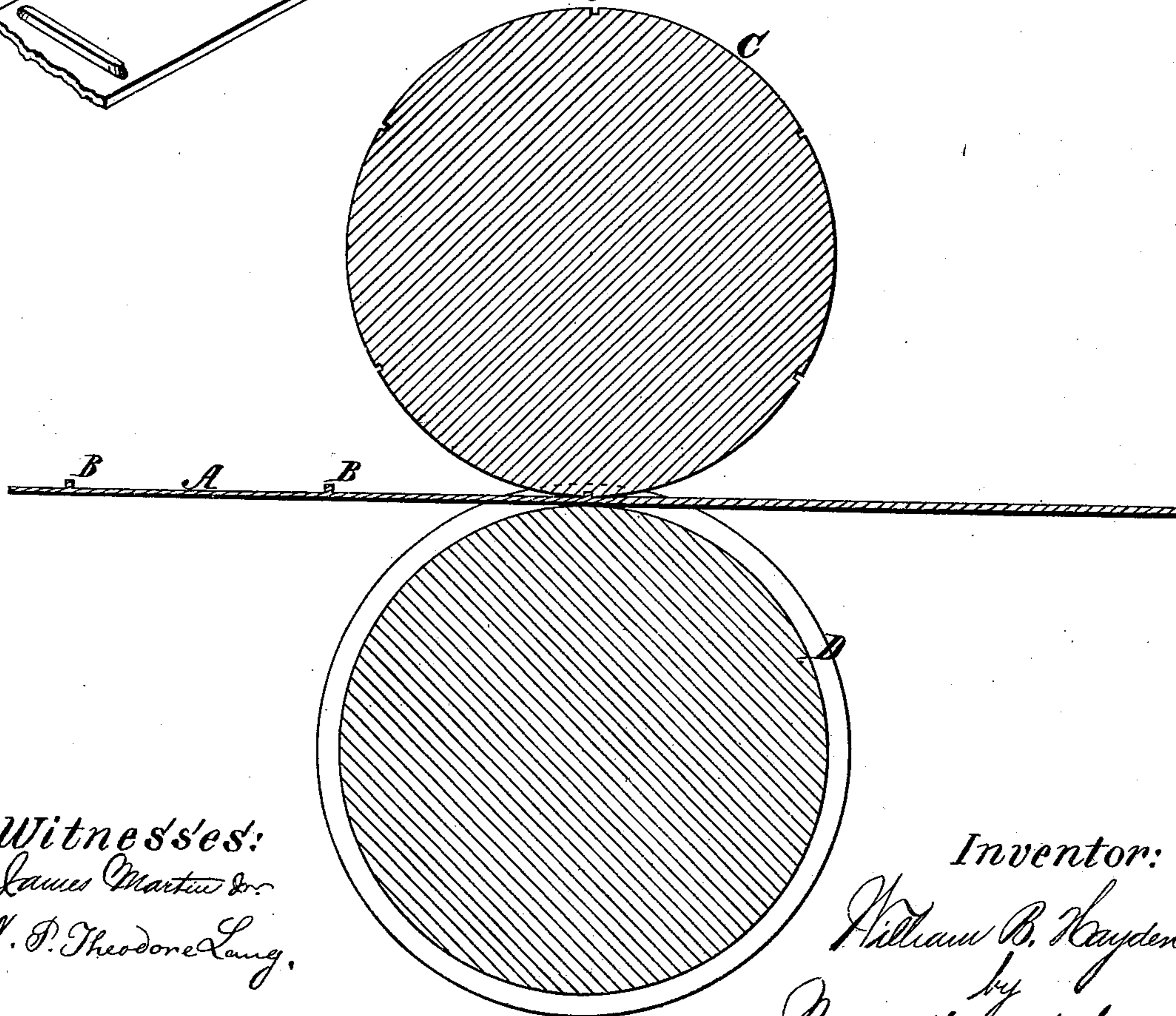
No. 180,128.

Patented July 25, 1876.

*Fig1.*



*Fig2.*



*Witnesses:*  
*James Martin & Co.*  
*J. P. Theodore Lang.*

*Inventor:*  
*William B. Hayden.*  
*by*  
*Wm. F. Lawrence*  
*Atty.*

# UNITED STATES PATENT OFFICE.

WILLIAM B. HAYDEN, OF COLUMBUS, OHIO.

## IMPROVEMENT IN BALE-HOOP IRON.

Specification forming part of Letters Patent No. **180,128**, dated July 25, 1876; application filed June 23, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM B. HAYDEN, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Bale-Hoop Iron; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a piece of my improved bale-hoop iron, and Fig. 2 a diagram showing one means for making such iron.

The nature of my invention consists in bale-hoop iron formed with transverse strengthening and retaining ribs on one of its surfaces; the said ribs being of metal homogeneous with the metal of the bale-hoop iron, and produced upon the same simultaneously with the manufacture of the article by any suitable process, such as rolling or swaging.

To enable others skilled in the art to understand my invention, I will proceed to describe it.

In the accompanying drawings, A is the bale-hoop iron, with narrow ribs B produced upon one of its surfaces by means of rollers C D, or by other suitable machinery. The ribs are preferably a little shorter than the width of the bale-hoop iron, and they are placed at proper distances apart.

Iron of the above description is very useful for baling cotton, hay, and other substances, and the ribs serve, in connection with a proper fastening loop or tie, as retaining devices for preventing the ends of the iron becoming

separated after they are lapped upon one another; and they also serve to strengthen the hoop-iron at the points—viz., the tied ends—where the strain comes when the expansion of the cotton, hay, or other substance is free to act upon the same. And they likewise embed themselves into the baled material, and prevent the bale hoop or iron slipping while the cotton, hay, or other bales are being handled, and by this means the rib, which is in use as the retaining-rib, in connection with the tying-loop, is relieved or assisted in bearing the strain.

The ribs B are upon the under side of the bale-iron when in use upon cotton, hay, or other substances.

The bale-hoop iron may be manufactured of proper given lengths for special uses, or it may be made in long strips and cut by the user into pieces of the desired length.

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

The within-described bale-hoop iron, formed with transverse ribs by swaging the metal of the hoop-iron on one of its faces, the said hoop-iron having a continuous unindented surface on its outer face, substantially as described.

Witness my hand, in the matter of my application for a patent for an improved bale-hoop iron, this 20th day of June, 1876.

WILLIAM B. HAYDEN.

Witnesses:

JOHN H. MORTIN,  
GEO. W. MEEKER.