L. Holms,

Girder.

No. 101,015. Patented Mar. 22. 1870.

Fig. I

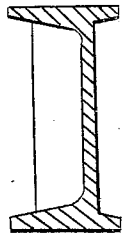


Fig. II.

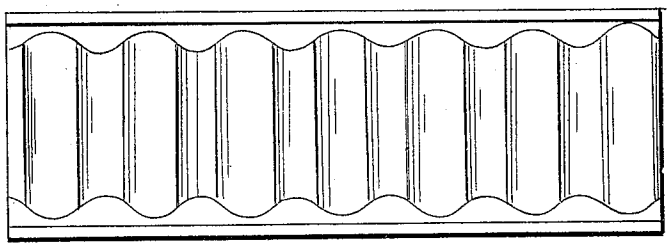


Fig. III.

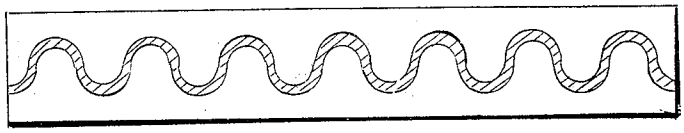


Fig. IV.

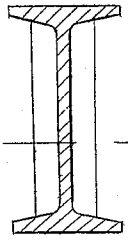


Fig. V.

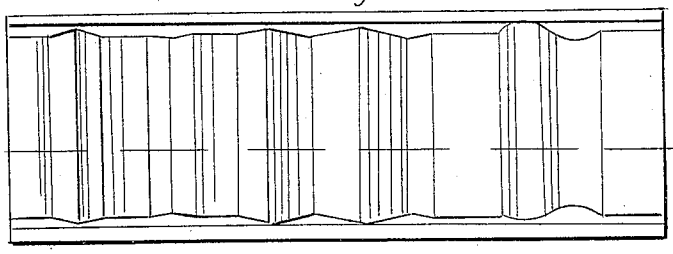
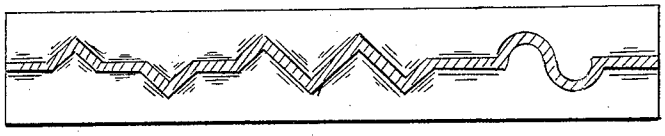


Fig. VI.



Witnesses,
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Thos. W. VanHoosen

Inventor.
Laurence Holms.

United States Patent Office.

LAURENCE HOLMS, OF PATERSON, NEW JERSEY.

Patent No. 101,015, *dated March* 22, 1870; *antedated March* 5, 1870.

IMPROVED METALLIC BEAM.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, LAURENCE HOLMS, of Paterson, in the county of Passaic, in the State of New Jersey, have invented a new and useful Wrought-Iron Beam for Building Purposes, which I denominate my "buttressed beam;" and I hereby declare the following to be a full and exact description thereof, reference being had to the annexed drawings making part of this specification, in which—

Figure I is a transverse section.

Figure II, a longitudinal elevation.

Figure III, a horizontal section taken on the red line seen in figs. I and II.

Figures IV, V, VI, in red lines, indicate variations of my buttressed beam.

My invention consists in giving lateral support and an increased amount of bearing-web to the flanches of wrought iron beams for building purposes by means of buttresses or corrugations formed in the process of rolling the iron. These buttresses are formed by deflecting the web from side to side of the center of the flanches, the divergence being regular, as seen in figs. II and III, or intermittent, as seen in figs. V and VI, less or more buttresses being formed, angular or wave-line, according to the nature and amount of support desired.

I do not limit myself to any of the sections shown so long as any deflection is used in a solid wrought-iron beam to give lateral support to the web and vertical support to the flanch of the same.

What I claim is—

A buttressed wrought-iron beam formed by corrugating or deflecting the web between the flanches in a vertical direction, thus constituting perpendicular supports, and at the same time strengthening the beam against lateral deflection.

LAURENCE HOLMS.

Witnesses:

GEORGE M. VAN HOSEN,

JNO. W. VAN HOSEN.