H. J. MERRENS. Beds for Straightening Iron-Plates.

Patented Aug. 25, 1874. No.154,338. Witnesses. Inventor.

## UNITED STATES PATENT OFFICE.

HENRY J. MERRENS, OF CLEVELAND, OHIO.

## IMPROVEMENT IN BEDS FOR STRAIGHTENING IRON PLATES.

Specification forming part of Letters Patent No. 154,338, dated August 25, 1874; application filed May 11, 1874.

To all whom it may concern:

Be it known that I, Henry J. Merrens, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a Bed used for Straightening Iron Boiler and similar Plates, of which the following is a specification:

This invention relates to a bed used for straightening iron boiler-plates or other similar plate-iron; and consists of a series of iron bars of suitable lengths and thicknesses bolted together, the said bars being separated a little apart by washers placed between them on the bolts. The object of the invention is to provide a bed combining strength and durability, the said bars being of wrought-iron, and having the holes through which the bolts pass elongated, so as to allow for the expansion and contraction of the metal without warping the bed. The space between the bars, allowing a circulation of air, also prevents the bed from becoming heated to so great an extent as a solid bed.

The difficulty in cast-iron beds for this purpose heretofore has been the liability to breakage and warping or twisting by the unevenness in heating of the bed by the plates to be straightened. These are all entirely overcome by my invention.

To enable others to fully understand my invention, I will proceed to describe the same in detail by the aid of the accompanying drawing, in which—

Figure 1 is a plan view of the above-mentioned bed. Fig. 2 is an end view of the same.

A, Figs. 1 and 2, are bars of wrought-iron, of uniform width and thickness, having a series of holes made through them, which are not round, but elongated longitudinally with the bars. These bars are placed together, with bolts B B put through the said holes, and having washers C C, also placed on the bolts between each bar, the whole being secured together by nuts D D.

The outside bars may be made thicker than the others to insure stiffness; and one of the outside bars is made wider than the other, which makes a flange designed to be used as a straight-edge.

Having described my invention, I claim— The above-described straightening-bed, consisting of the bars A, bolts B B, washers C C, and nuts D D, as and for the purpose set forth. H. J. MERRENS.

Witnesses:

GEO. A. KOLBE, GEO. MENGER.