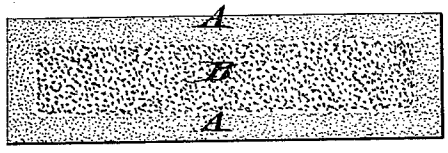
T. J. TOLAN.

BARS FOR JAILS, PRISONS, &c.

No. 192,471. Patented June 26, 1877.



WITNESSES:

J. H. Scarborough.

Francis McAstle

INVENTOR:

T. J. Tolan.

BY

ATTORNEYS.

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UNITED STATES PATENT OFFICE.

THOMAS J. TOLAN, OF FORT WAYNE, INDIANA.

IMPROVEMENT IN BARS FOR JAILS, PRISONS, &c.

Specification forming part of Letters Patent No. **192,471**, dated June 26, 1877; application filed March 19, 1877.

To all whom it may concern:

Be it known that I, THOMAS J. TOLAN, of Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful Improvement in Bars for Jails, Prisons, &c., of which the following is a specification:

The figure is a cross-section of one of my improved prison-bars.

The object of this invention is to furnish bars, rods, and plates for jail and prison purposes, which shall be hard upon the outside, so that they cannot be filed or sawn, and at the same time tough so that they cannot be broken.

The invention consists in bars, rods, and plates for jail and prison purposes, made of iron carbonized upon the outer surface, and in its natural state in the interior, as hereinafter fully described.

The iron in the shape of bars, rods, and plates, of the required size and form, is carbonized by any of the well-known processes upon its outer surface A to the depth of from one-thirty-second to one-eighth of an inch, leaving the iron in the interior B of the bars, rods, or plates in its natural state.

In this way the iron is made hard upon its outside, so that it cannot be filed or sawn, while its interior, being in the natural state, will be tough, so that it cannot be broken, and will thus afford a better protection against the efforts of prisoners to escape, and the efforts of their friends to liberate them, than the bars, rods, and plates heretofore made.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An iron bar carbonized only on the surface, substantially as and for the purpose specified.

THOMAS J. TOLAN.

Witnesses:

B. S. TOLAN,

JOSEPH H. STOPHLET.