C. J. COE. Jail-Bar.

No. 206,390.

Patented July 30, 1878.

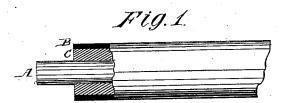


Fig.2.



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## UNITED STATES PATENT OFFICE.

CALVIN J. COE, OF LOWVILLE, NEW YORK, ASSIGNOR TO HIMSELF AND JOHN PFISTER, OF SAME PLACE.

## IMPROVEMENT IN JAIL-BARS.

Specification forming part of Letters Patent No. **206,330**, dated July 30, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that I, CALVIN J. COE, of Lowville, Lewis county, New York, have invented an Improvement in the Manufacture of Bars for Jails, &c., of which the following is a specification:

The object of my invention is to produce a metallic bar of great tensile strength, yet of extreme hardness; and this I effect by making a bar as shown in the drawing, in which—

Figure 1 is a longitudinal view, partly in section, of my improved jail-bar, and Fig. 2 a transverse section.

The core or center A of the bar is of tough malleable iron or steel. The tube forming the surface may be of wrought metal, and the intermediate portion is of chilled iron of such hardness as to resist the action of any tool that can be brought against it, the core imparting the requisite tensile strength.

In order to manufacture the bar with facility, I place a bar, A, of malleable iron or low-grade

steel, in the center of a malleable-iron tube, B, of much greater diameter, and then fill the intervening space with molten cast-iron C, which becomes chilled by its contact with the metal tube.

In order to facilitate attachment to the lintels and jambs or frames, the core portion  $\Lambda$  may project beyond the body of the bar for insertion in the sockets of the stone.

I claim—

As a new manufacture, a jail-bar consisting of a core and face of malleable metal and intervening body of chilled or hardened metal, all united in one bar, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CALVIN J. COE.

Witnesses:

A. M. LANPHER, E. FREEMAN.