

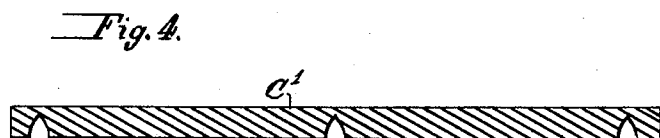
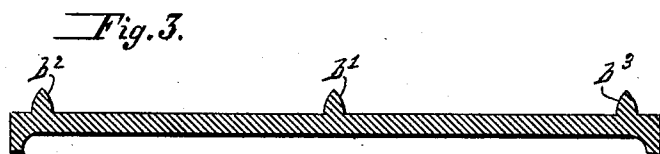
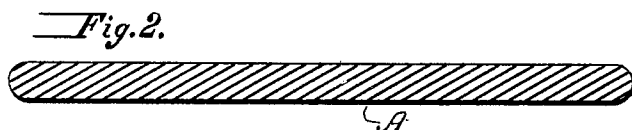
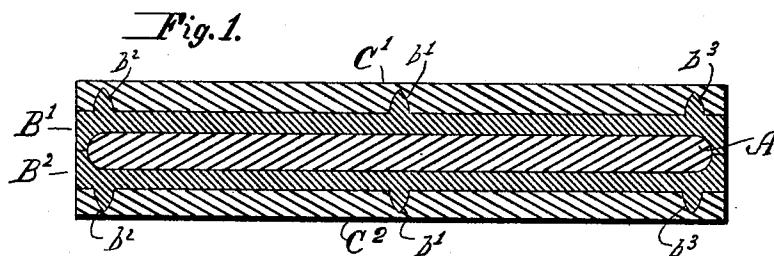
(No Model.)

L. D. YORK.

JAIL BAR.

No. 480,358.

Patented Aug. 9, 1892.



WITNESSES:
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UNITED STATES PATENT OFFICE.

LEVI D. YORK, OF PORTSMOUTH, OHIO.

JAIL-BAR.

SPECIFICATION forming part of Letters Patent No. 480,358, dated August 9, 1892.

Application filed March 17, 1892. Serial No. 425,261. (No model.)

To all whom it may concern:

Be it known that I, LEVI D. YORK, of Portsmouth, in the county of Sciota and State of Ohio, have invented a certain new and useful Improvement in Bars for Protecting Windows and other Openings, of which the following is a specification.

My invention relates particularly to what are ordinarily known as "jail-bars." These bars are made of strata of hard steel and of soft steel or iron.

My improvement consists in a bar composed of a center stratum of soft metal, two embracing or overlapping strata of hard steel provided with longitudinal ribs, one at the center and another between the center rib and each edge, and outer layers of soft metal.

In the accompanying drawings, Figure 1 is a transverse section of a bar embodying my improvement. Fig. 2 is a cross-section of the center stratum. Fig. 3 is a cross-section of one of the two hard-metal strata which embrace or overlap the center stratum. Fig. 4 is a cross-section of one of the outer strata or layers of soft metal.

Similar letters of reference designate corresponding parts in all the figures.

A designates a center stratum of soft material, such as iron or soft steel. It has parallel sides and is shown as having rounded edges. An advantageous way of forming it is by rolling.

B' B² designate two strata or layers of hard steel. These have parallel sides and are arranged in parallel positions. The outer edges of each of these strata or layers are extended toward the outer edges of the other, and it is intended that these edges of the two strata shall abut. When this is the case, the strata B' B² will embrace and inclose the stratum A. On the outer sides of the strata B' B² are ribs b' b² b³. All these ribs extend lengthwise of the strata B' B². The ribs b' are shown as arranged midway between the edges of the strata

B' B², and the ribs b² b³ are located between the central ribs b' and the edges of the strata B' B². The strata B' B² may be formed by casting or rolling, preferably by casting.

C' C² designate outer strata or layers of soft metal—such, for instance, as soft iron or steel. They may be smooth on the outer sides and on their inner sides so formed as to fit the outer sides of the strata B' B², including the ribs b' b² b³. The strata C' C² may be produced by rolling.

The strata A C' C² may be piled in a mold and the strata B' B² may be cast between them.

A bar composed of the strata described may be rolled down to the desired dimensions.

The principal use of this bar is for jails. It is common with criminals confined in jails to cut through the outer layer or stratum of soft metal and then break the brittle stratum or layer of hard steel by force. The object of my improvement is to so combine the strata or layers of hard steel with the outer strata or layers of soft metal that the latter cannot be cut through, so that the bar will be deprived of the strength of such outer strata or layers. The arrangement of the ribs b' b² b³ attains this object.

What I claim as my invention, and desire to secure by Letters Patent, is—

A bar composed of a center stratum of soft metal, two embracing or overlapping strata of hard steel provided with longitudinal ribs, one at the center and another between the center rib and each edge, and outer strata or layers of soft metal in which the longitudinal ribs are embedded, substantially as specified.

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

LEVI D. YORK.

Witnesses:

S. O. EDMONDS,
C. R. FERGUSON.