May 2, 1939. F. J. BAYON 2,156,579

CELL BAR

Filed Oct. 31, 1938

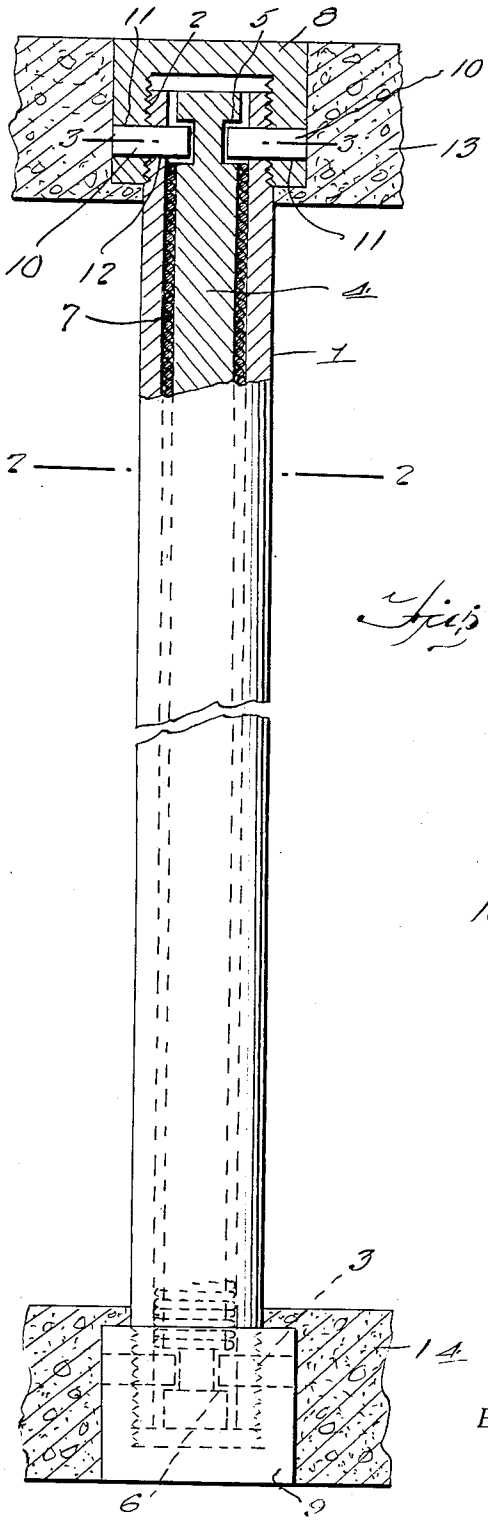


Fig. 1.

Fig. 2.

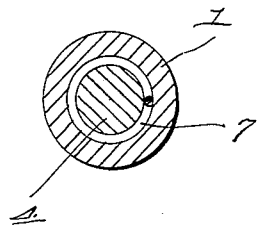
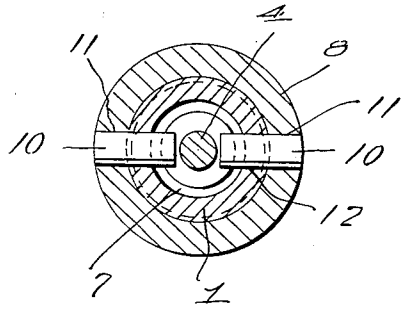


Fig. 3.



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2,156,579

CELL BAR

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Application October 31, 1938, Serial No. 238,012

3 Claims. (Cl. 189—9)

My invention relates to improvements in bars for use in jails, or penitentiary cells, and the like.

The principal object of the invention is to provide a bar which is proof against being sawed, hacked, or drilled through and which is strong, durable, and comparatively inexpensive to manufacture and install.

To the accomplishment of the above, and subordinate objects presently appearing, a preferred embodiment of my invention has been illustrated in the accompanying drawing, set forth in detail in the succeeding description, and defined in the claims appended hereto.

In the drawing:

Figure 1 is a view partly in front elevation and partly in section of the preferred embodiment of my improved bar installed,

Figure 2 is a view in transverse section taken on the line 2—2 of Figure 1, and

Figure 3 is a similar view taken on the line 3—3 of Figure 1.

Referring to the drawing by numerals, the illustrated embodiment of my improved bar comprises an outer cylindrical casing 1 formed of seamless steel tubing and having externally threaded upper and lower ends 2 and 3, a rod-like core 4 of somewhat smaller diameter than the internal diameter of the casing 1, said core being coextensive in length with that of said casing and preferably formed of rolled steel with a pair of upper and lower circumferential grooves 5 and 6 therein adjacent opposite ends thereof, respectively, and a sheathing, or armor, 7 comprising a helix of closely coiled piano wire sleeved onto the core 4 between the grooves 5 and 6 and loosely filling the space between the casing 1 and said core. A pair of cylindrical cup-like caps 8 and 9, also of cold rolled steel, are threaded onto the upper and lower ends 2 and 3 of the casing 1 respectively. A pair of steel pins 10 extend inwardly from each cap, 8, 9, in diametrically opposite relation and through the adjacent end of the casing 1 into the adjacent groove, 5, 6, of the core 4, said pins having a drive fit in suitable apertures 11 and 12 provided in the cap and casing, respectively, and their inner ends spaced from the walls of the grooves 5, 6, with a slight clearance, whereby the core 4 and sheathing 7 are freely rotatable in the casing 1 but held against endwise movement by said pins 10. The caps 8 and 9 are imbedded in upper and lower headers 13 and 14 of concrete, or cement, preferably reinforced, and which may take the form of flooring, beams, or rails, as desired.

As will now be seen, the described assembly cannot be sawed through because of the fact that if the casing 1 is cut through, further sawing operations will be prevented by rotation of the sheathing 7, or jamming of the saw teeth between the coils of said sheathing. Assuming that the sheathing may be sawed through, further sawing would be blocked by rotation of the core 4. Drilling through the assembly is positively prevented because of the fact that the coils of the sheathing 7 would lock the drill tool. Therefore, it is impossible to drill and pin the sheathing 7 and core 4 to the casing 1 as a condition precedent to sawing through. Furthermore, it is impossible to withdraw the casing 1 if the latter be sawed through because of the fact that said casing is anchored at both ends to the pins 10.

Filing through the assembly is prevented for the same reasons enumerated in the above as preventing sawing.

The foregoing, will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly, the invention as described, is susceptible of modification without departing from the inventive concept and right is herein reserved to such modifications as fall within the scope of the subjoined claims.

What I claim is:

1. A cell bar assembly comprising parallel headers of concrete, a pair of cap members imbedded in said headers, respectively, a tubular casing having the opposite ends thereof fixed in said cap members, respectively, a rod-like core in said casing extending from end to end of the latter and spaced therefrom, and a sheathing comprising a helix of closely coiled steel wire sleeved on said core and fitting between the same and said casing, the core and sheathing being relatively rotatable and with respect to said casing.

2. A cell bar assembly comprising parallel headers of concrete, a pair of cap members imbedded in said headers, respectively, a tubular casing having the opposite ends thereof fixed in said cap members, respectively, a rod-like core in said casing extending from end to end of the latter and spaced therefrom, and a sheathing comprising a helix of closely coiled steel wire sleeved on said core and fitting between the same and said casing, the core and sheathing being relatively rotatable and with respect to said casing, and means to block endwise movement of the core and sheathing.

3. A cell bar assembly comprising parallel headers of concrete, a pair of cap members im-

bedded in said headers, respectively, a tubular casing having the opposite ends thereof fixed in said cap members, respectively, a rod-like core in said casing extending from end to end of the latter and spaced therefrom, and a sheathing comprising a helix of closely coiled steel wire sleeved on said core and fitting between the same and said casing, the core and sheathing being relatively rotatable and with respect to said casing, and means to block endwise movement of the core and sheathing comprising pairs of pins extending inwardly from the cap members through said casing in diametrically opposite relation, the ends of the core being circumferentially grooved to receive said pins, and said sheathing being confined between said pairs of pins.

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