

No. 714,350.

Patented Nov. 25, 1902.

D. F. YOUNGBLOOD.

INTERLOCKING BAR GRATING FOR JAILS.

(Application filed Mar. 31, 1902.)

(No Model.)

Fig. 1.

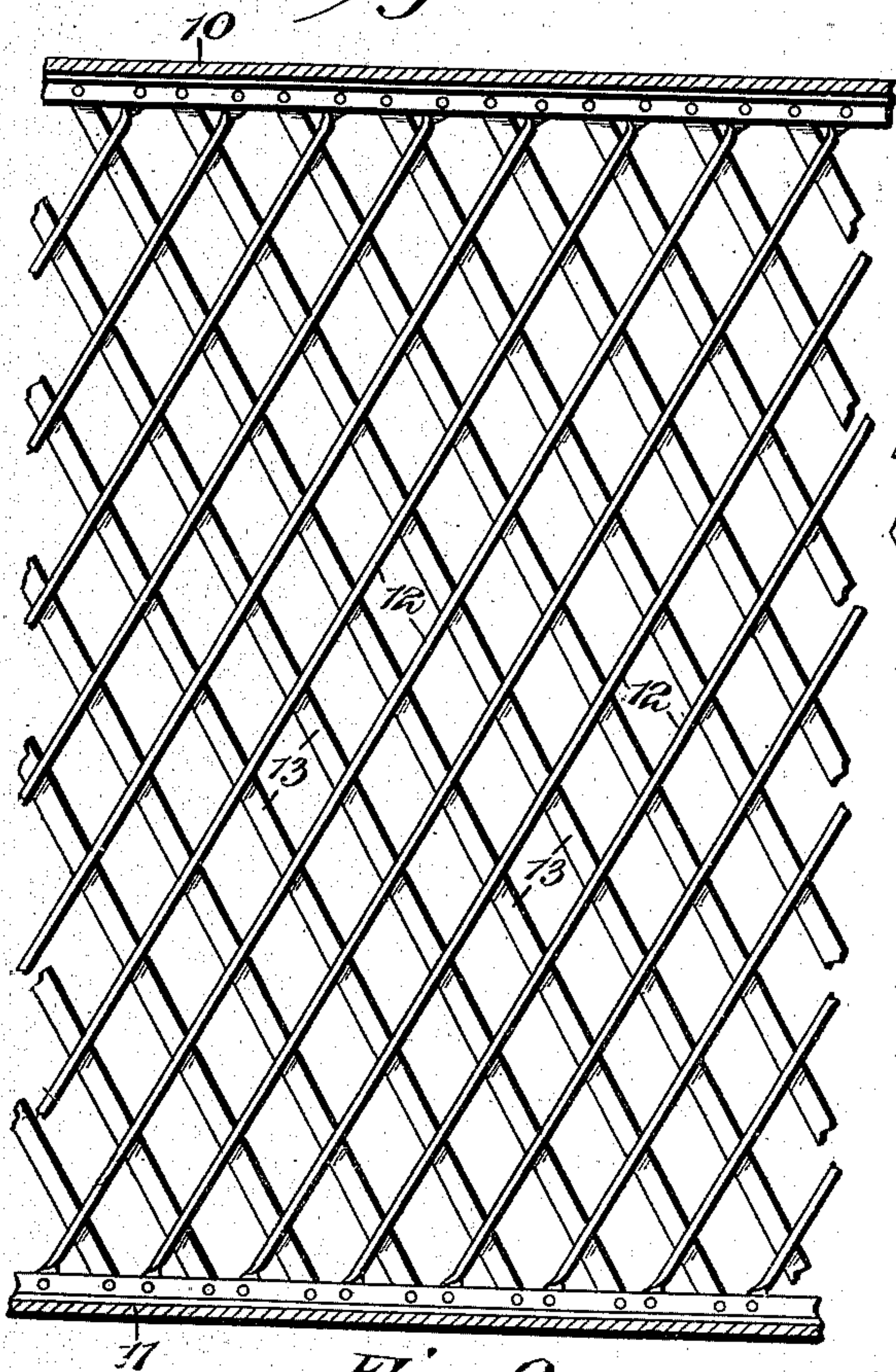


Fig. 3.

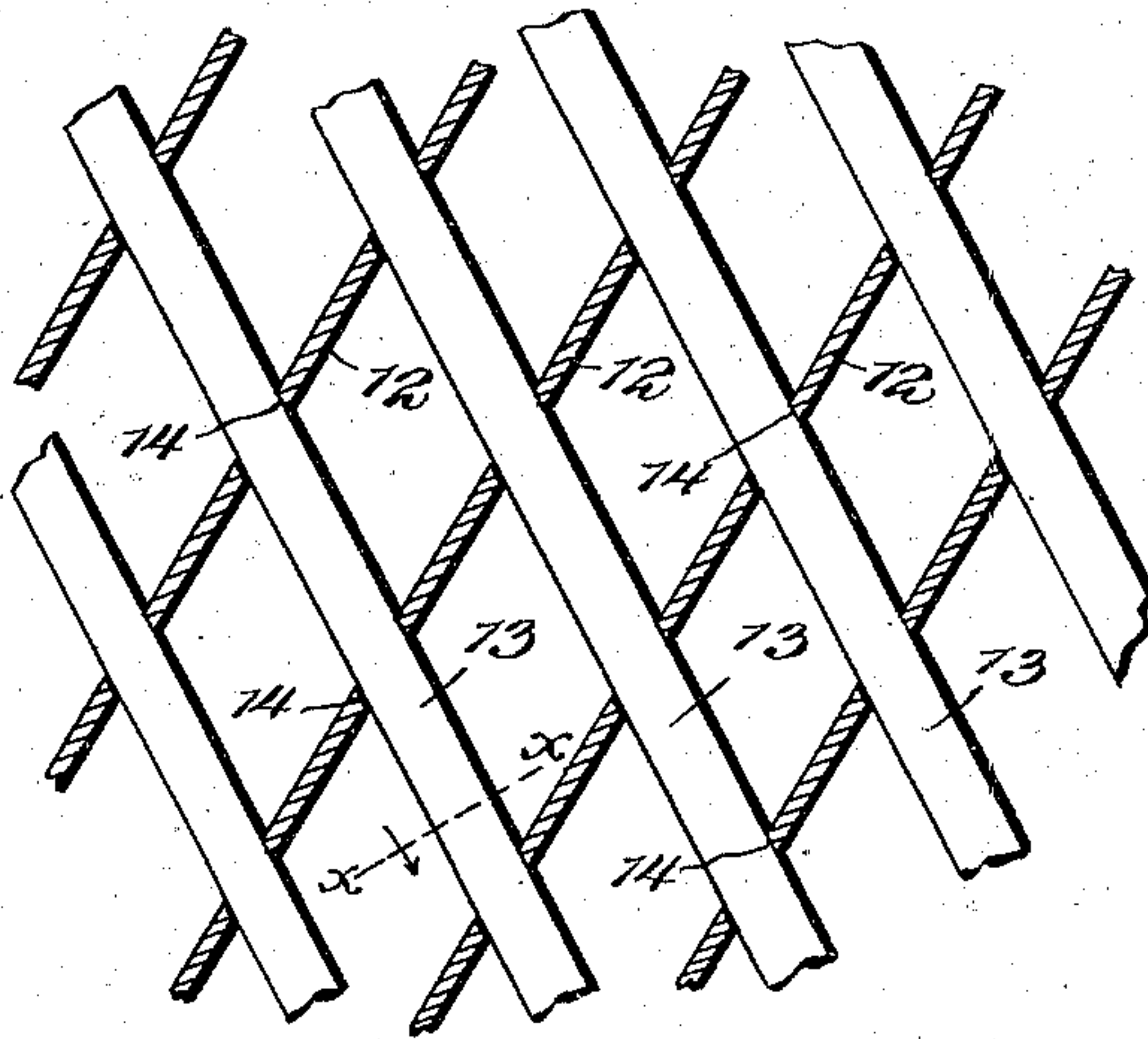
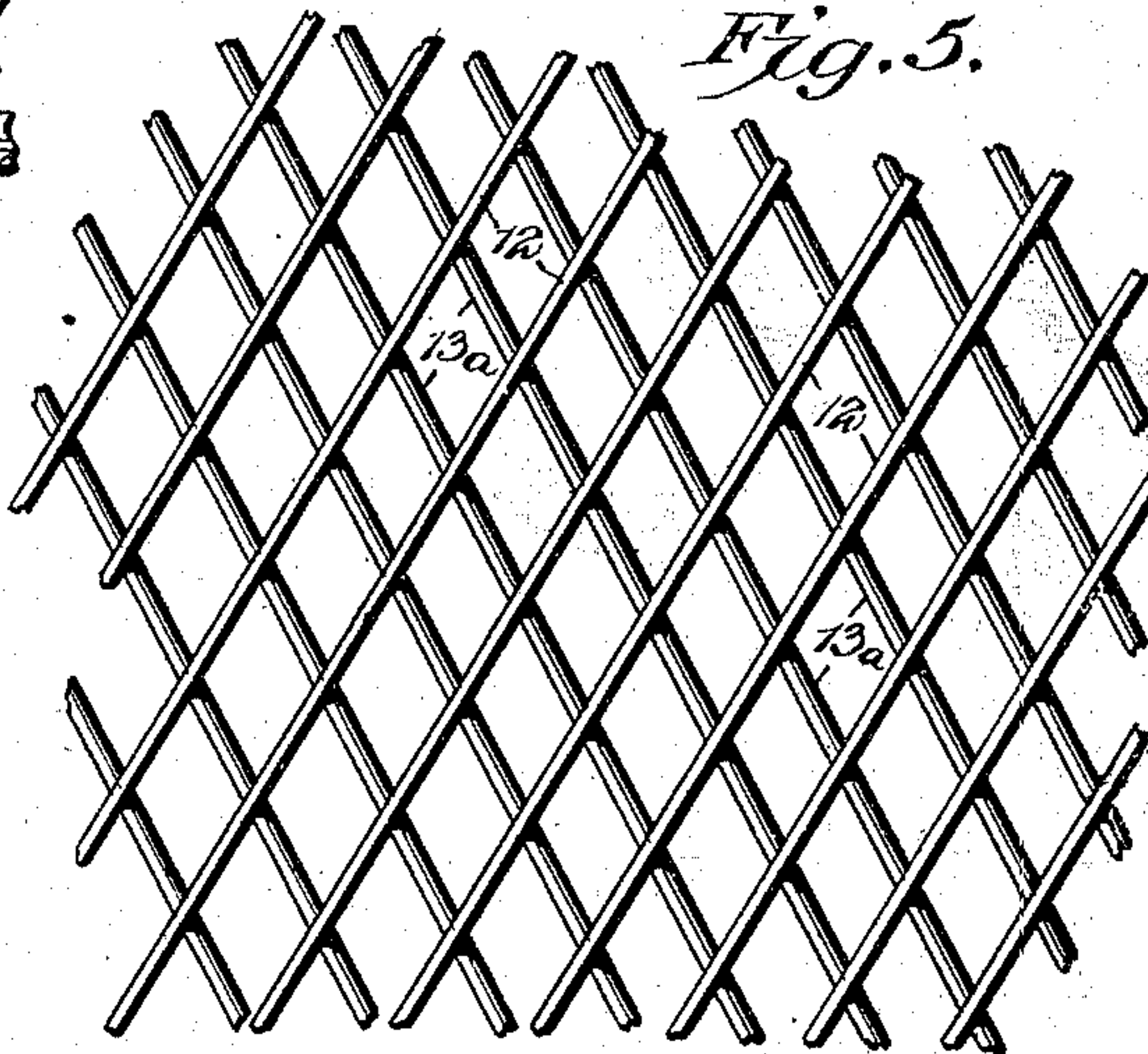


Fig. 4.



Fig. 5.



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DAVID FRANKLIN YOUNGBLOOD, OF SAN ANTONIO, TEXAS.

INTERLOCKING-BAR GRATING FOR JAILS.

SPECIFICATION forming part of Letters Patent No. 714,350, dated November 25, 1902.

Application filed March 31, 1902. Serial No. 100,812. (No model.)

To all whom it may concern:

Be it known that I, DAVID FRANKLIN YOUNGBLOOD, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented a new and useful Interlocking-Bar Grating for Jails, of which the following is a specification.

The present invention relates to gratings, and particularly to that class employed in jails. In these structures as ordinarily made upright and horizontal bars are provided which are located at right angles to each other, these bars being necessarily secured together at their points of intersection to prevent their being spread apart.

One of the objects of the present invention is to associate and combine the cross-bars so that the necessity of separate locks or rivets for securing them together at their intersections is obviated, at the same time the bars being shorter and consequently stiffer to withstand any lateral strain.

The improved construction will be readily understood upon referring to the accompanying drawings when taken in connection with the following specification.

In the drawings, Figure 1 is a side elevation of a grating constructed in accordance with the present invention. Fig. 2 is a perspective view of a portion of the same on an enlarged scale. Fig. 3 is a vertical sectional view. Fig. 4 is a detail sectional view taken on the line X X of Fig. 3. Fig. 5 is a view in elevation of a slightly-modified form of construction.

Similar numerals of reference designate corresponding parts in all the figures of the drawings.

In carrying out this invention the usual ceiling 10 and floor 11 are provided, said ceiling and floor being connected by inclined bars 12 and 13, that are arranged in intersecting relation and are disposed obliquely to each other. The bars 12 of one set are arranged with their flat sides uppermost and are provided with spaced openings 14, that pass obliquely through the same from side to side, the said openings being arranged longitudinally of the bars, the openings of one bar being in alinement with corresponding openings of the others. Through these openings

pass the bars 13 of the other set, said bars being arranged on edge, as shown, and so disposed that their edges are located at the same inclination or obliquity as the end walls of the openings, as clearly shown in Fig. 3. In practice it has been found desirable to make the bars 12 wider than the bars 13, so that there will be no loss of strength due to the openings through the same. Instead of flat side bars 13 rods 13^a may be employed, as shown in Fig. 5, and bars of various shapes may be substituted—as, for instance, angle, T, channel, and the like. In all of these cases the openings are made of a corresponding shape, but their oblique relation is maintained, the degree of obliquity, however, being immaterial, though that shown is perhaps preferable, as the interlocking is stronger than if it was nearer a right angle. No claim is made to the specific manner of fastening the terminals of the bars to the ceiling and floor, and said connection may be accomplished in any manner found desirable and convenient. By this construction all of the bars may be made comparatively short, with a resultant stiffness and rigidity not possible of obtainment when horizontal bars are provided which extend from end to end. Further than this, the oblique arrangement of the bars as distinguished from right angular relation serves to more securely hold the bars from spreading in either direction. There is another advantage in this construction, in the fact that in sawing or breaking the bars it would usually be done diagonally across the same and not square across, which thus makes the sawing-surface larger and the breaking-line longer.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

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

1. A grating comprising obliquely-associ-

ated sets of bars, the bars of one set having widefaces which are arranged uppermost, and being furthermore provided with openings that extend through from the upper to the
5 under faces, the end walls of said openings being disposed obliquely to said upper and under faces, and the bars of the other set passing through the openings of the first-mentioned bars.

10 2. In a jail, the combination with a ceiling and floor, of a grating comprising obliquely-associated sets of bars connecting the ceiling and floor, the bars of one set having flat faces which are arranged uppermost, and being fur-

thermore provided with longitudinally-dis- 15
posed obliquely-arranged openings extending through from side to side, the bars of the other set being arranged on edge and passing through the openings of the first-mentioned bars. 20

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

DAVID FRANKLIN YOUNGBLOOD.

Witnesses:

R. L. RUSHING,
JOHN WOODS.