No. 792,525. PATENTED JUNE 13, 1905.

C. S. LLOYD.

MEANS FOR SECURING THE ENDS OF WIRE MATTRESSES.

APPLICATION FILED FEB. 16, 1903.

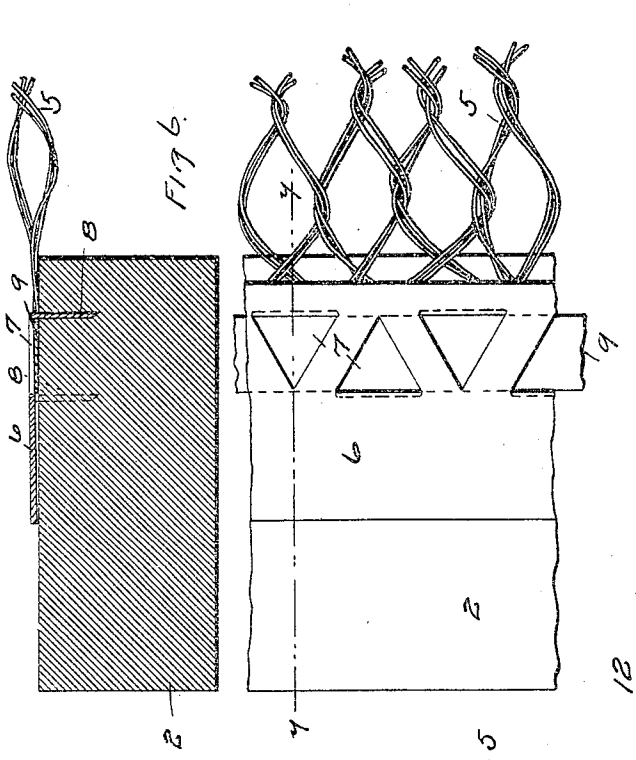


FIG 6.

FIG 5.

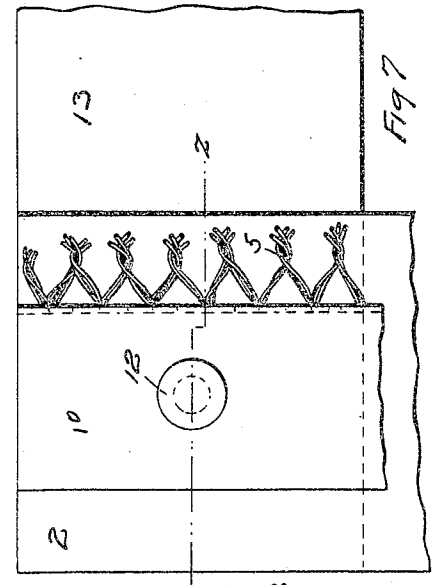


FIG 7.

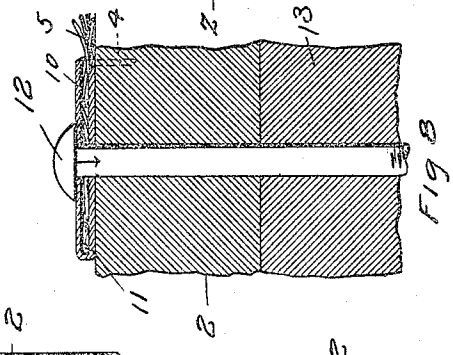


FIG 8.

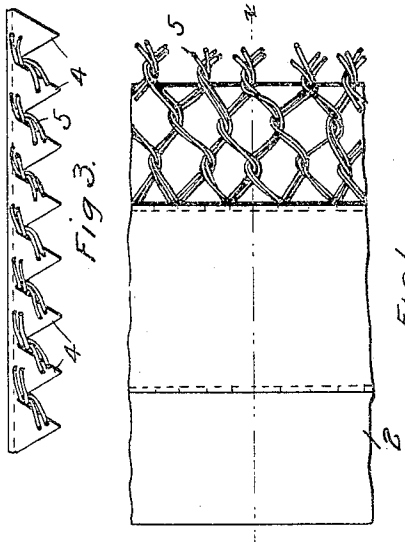


FIG 3.

FIG 1.

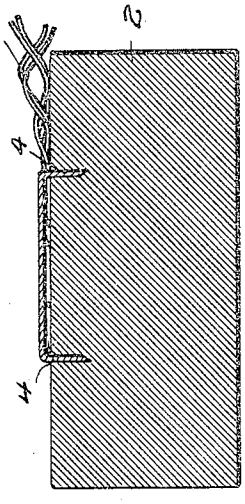


FIG 2.

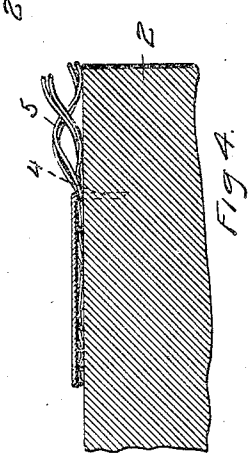


FIG 4.

WITNESSES
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No. 792,525. Patented June 13, 1905.

UNITED STATES PATENT OFFICE.

CYRUS SING LLOYD, OF MINNEAPOLIS, MINNESOTA.

MEANS FOR SECURING THE ENDS OF WIRE MATTRESSES.

SPECIFICATION forming part of Letters Patent No. 792,525, dated June 13, 1905.

Application filed February 16, 1903. Serial No. 143,492.

To all whom it may concern:

Be it known that I, CYRUS SING LLOYD, of Minneapolis, county of Hennepin, State of Minnesota, have invented certain new and useful Improvements in Means for Securing the Ends of Wire Mattresses, of which the following is a specification.

My invention relates to wire mattresses; and the object of the invention is to provide means for securely fastening the ends of the wires composing the mattress fabric to the end rails.

A further object is to provide a fastening means which is simple and inexpensive to manufacture and will present a neat finished appearance to the bed.

The invention consists generally in a plate provided with a series of teeth or serrations, between which and the end rail the mattress fabric is clamped.

Further, the invention consists in various constructions and combinations, all as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a portion of an end rail embodying my invention. Fig. 2 is a section on the line *x x* of Fig. 1. Fig. 3 is an edge view of the plate, showing the position of the wires between the teeth. Fig. 4 is a sectional view of a modified construction. Fig. 5 is a plan view showing the teeth pressed out of the plate. Fig. 6 is a sectional view on the line *y y* of Fig. 5. Fig. 7 is a plan view of the corner of the bed, showing another form of fastening means applied thereto. Fig. 8 is a section on the line *z z* of Fig. 7.

In the drawings, 2 represents the end rail of a bed and provided on its edge with a series of downwardly-turned teeth 4. These teeth are forced into the rail by a pressure or other suitable means until the plate is nearly flush with the top of the rail, as shown in Fig. 2. The ends of the fabric 5 are inserted between the teeth on the inner edge of the plate before they are forced into the wood, and when the teeth enter the wood the wires will slip up into the notches between them until they reach the apex thereof, as shown in Fig. 3. The ends of the wires will be turned in partially behind the teeth and being wedged in the notches will be held firmly, and it will be impossible to draw them out after the teeth are forced into the rail.

I prefer to provide the rows of teeth on both edges of the plate to hold it more securely and present a more finished appearance; but, if preferred, the outer row may be omitted, as shown in Fig. 4, without in any way lessening the grip of the inner row of teeth on the wires.

In Fig. 5 I have shown another modification, consisting of a plate 6, having a series of triangular holes 7 punched therein, preferably near the inner edge of the plate, and these triangular openings are so arranged that the base or side of one alternates with the point or apex of the adjoining one. The metal punched out of said openings is attached to the plate 6 on one side and forms a series of teeth 8, that are arranged zigzag and between which the ends of the wires are held. The diagonal or zigzag arrangement of these teeth permits me to insert the wires between the plate and the end rail in such a way that a direct pull will not be exerted upon them. One group of wires may be carried around one edge of one tooth between the plate and the rail and the adjacent group of wires passed around the opposite edge of the same tooth, as shown in Fig. 5, so that when tension is applied to the fabric the strain on the wires will be exerted very largely on the edges of the teeth and no matter what weight is put upon the fabric it will be impossible to draw out the wires from between the plate and the rail.

Fig. 6 indicates in full and dotted lines the irregular or zigzag arrangement of the teeth. To conceal the ends of the wires and the exposed portions of the rail through the opening 7, I prefer to provide a thin strip 9, that is inserted between the teeth under the openings in the plate 6.

In Figs. 7 and 8 I have shown still another modification in the securing means, which consists in providing a plate 10, having teeth similar to those shown and described in Figs. 1 to 4 and also having a folded or turned-in portion 11, between which and the top 10 the

ends of the wires are inserted, as shown in Fig. 8. These teeth will grip the ends of the wires and hold them firmly against withdrawal from between the plates even when subjected to a most intense strain. The plates shown in all these figures are secured at the ends by a bolt 12, that passes down through the end rail into the side rail 13, over which the end rail is placed.

I claim as my invention—

1. The combination, with a mattress-frame rail, of a wire fabric, a plate having a series of continuously-extending teeth having V-shaped notches between them and adapted to enter the meshes of said fabric, the strands of the wires being wedged in the V-shaped notches between said teeth when they are forced down into the rail, and the ends of said wires being twisted together under said plate and in the rear of said teeth, whereby the strands will be firmly held and withdrawal of the wires prevented.

2. The combination, with a wire-mattress fabric and its end rail, of a plate having two rows of depending teeth formed by punching a series of triangular holes in said plate, each hole being reversely arranged with respect to the adjoining holes and the teeth of one row alternating in position with those of the other row, and said teeth being adapted to be driven into said rail and between which teeth and rail the mattress fabric is gripped and held, substantially as described.

In witness whereof I have hereunto set my hand this 12th day of January, 1903.

CYRUS SING LLOYD.

In presence of—
RICHARD PAUL,
C. G. HANSON.