2 Sheets—Sheet 1.

T. & J. N. TRACY.

Bed Bottom.

No. 202,302. Patented April 9, 1878.

Fig 1.

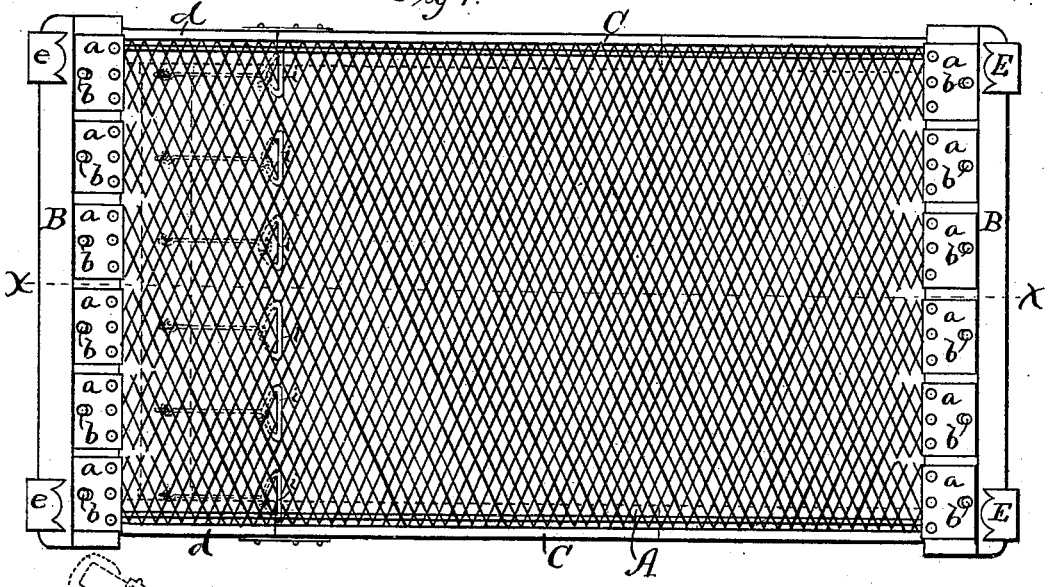
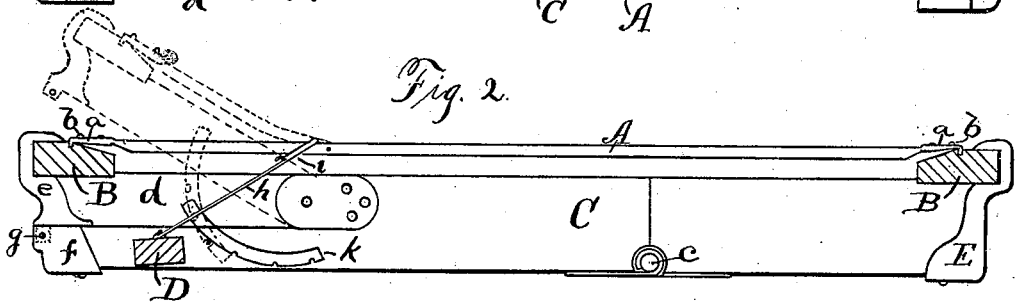


Fig. 2.



Witnesses.
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L. S. Burr

Inventors.
Thomas Tracy.
John N. Tracy.
By James Shepard Atty.

2 Sheets—Sheet 2.

T. & J. N. TRACY.
Bed Bottom.

No. 202,302. Patented April 9, 1878.

Fig. 3.

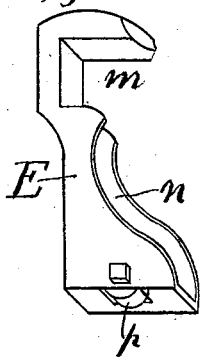


Fig. 4

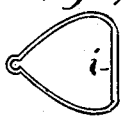


Fig. 5.

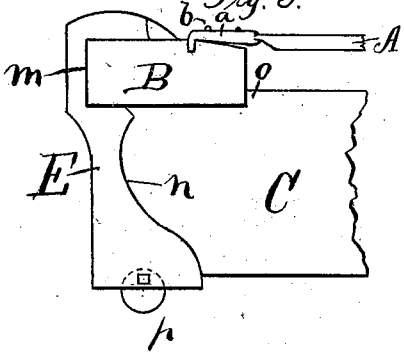
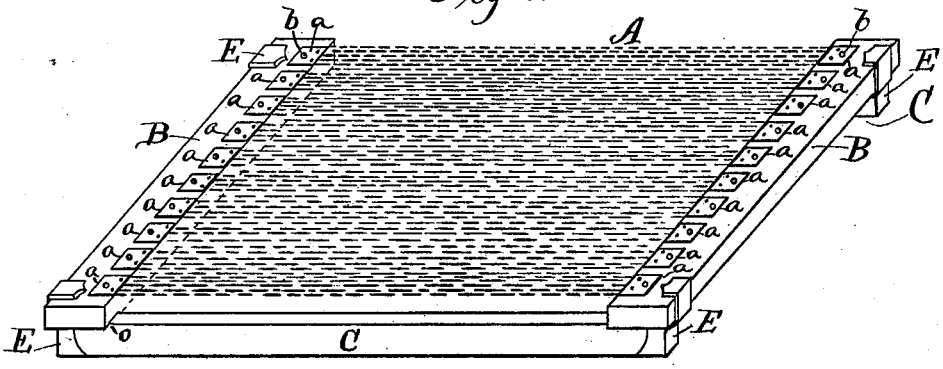


Fig. 6.



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UNITED STATES PATENT OFFICE.

THOMAS TRACY AND JOHN N. TRACY, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN BED-BOTTOMS.

Specification forming part of Letters Patent No. **202,302**, dated April 9, 1878; application filed January 17, 1878.

To all whom it may concern:

Be it known that we, THOMAS TRACY and JOHN N. TRACY, both of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Bed-Bottoms, of which the following is a specification:

The invention relates to the manner of attaching the fabric to the rails and the manner of attaching the frame together; and consists, first, of dividing the ends of a woven-wire fabric into groups with clasps at the end for attachment to the end rails; second, of the peculiar construction of the corner-irons and the combination of them with the frame and fabric, all as hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of a bed-bottom which embodies our invention. Fig. 2 is a longitudinal section of the same on line *x x* of Fig. 1, with the bolster represented by broken lines in an elevated position. Fig. 3 is a perspective view of one of the corner-irons detached. Fig. 4 is a detached view of one of the loops or stays for the bolster arrangement. Fig. 5 is a side elevation of one corner of the bed-bottom, and Fig. 6 is a perspective view of a plain bed-bottom frame and fabric which embody the same invention.

A designates the fabric known as "woven wire," the same being composed of helical coils of wire interlocked in any ordinary manner, either single or double weave.

At each end of the fabric a series or group of coils are separated from the rest by means of the adjoining coils between each group not being interlocked for a short distance from the end. The ends of these groups are secured to clasps or plates *a* by rivets or otherwise, and each clasp is provided with one or more eyes, which receive the pins or hooks *b* on the end rails B B. Said clasps are also provided with a downward-projecting flange on the end, which flanges rest in a narrow groove running longitudinally with the end rails, as shown, and prevent the clasp from swinging round out of square. If desired, these flanges may be dispensed with.

Heretofore the woven-wire fabric has been formed whole at the ends, so that in straining it upon the frame the whole width of the fabric had to be stretched at one time, which required so much power and machinery that the frames, with the fabric stretched thereon and permanently secured thereto, were necessarily put together at the factory, and thereby made so bulky as to make transportation of them very expensive.

By dividing the fabric into sections or groups of coils having clasps at the end the fabric may be rolled up into a longitudinal roll occupying but little space, the frame taken apart, and the whole shipped in a small box. When the same reaches its destination the frame is put together, the fabric unrolled, and, by means of a small hook with cross-head handle (which can be shipped with the bed for that purpose) inserted in the eyes *a* of the clasps, the fabric can easily be stretched, one section at a time, by any ordinary person without the aid of machinery, and hooked upon the pins *b* of the end rails, as shown in Figs. 1 and 6.

The side rails C C are divided lengthwise for a short distance at one end, as shown, and the upper portion, which we will call the "bolster-rail" *d*, is hinged to the main side rails C at one end, and one end rail is secured to the opposite end of said bolster-rails *d d*.

The corner-irons *e* of the bolster-rails have a small tenon on their lower side, (indicated by broken lines in Fig. 2,) which sets into a mortise (not shown) in the top of the corner-irons *f*. The two irons *e* and *f* are held together, when the bolster is not elevated, by a pin, *g*, passing through the iron *f* and tenon on iron *e*. A cross-rail, D, is attached to the divided portion of the full-length side rails C, and to this cross-rail a series of rods, *h*, and stays *i* are secured, the latter embracing portions of the fabric A the whole extent of its width at a point near the jointed ends of the bolster-rails *d d*, the rods being connected to the cross-rail by staples or other flexible joints.

It is old to divide the end rails to make a bolster-frame and to secure the fabric by rods to a cross-rail underneath the fabric.

The corner-irons E E (most clearly shown in Figs. 3 and 5) have a transverse mortise or socket, *m*, at their upper end, open through from side to side, which receive the outer edge of the end rails B B, but which socket *m* does

not embrace the inner edge of said rails, thereby allowing their inner edge to be lifted a little when the fabric is strained on the frame. The lower ends of said corner-irons have a socket, *n*, standing at right angles to the socket *m*, and opening into each other. The side rails C are received by the socket *n*, and are rabbeted on the top edge, so as to form a shoulder, *o*, Fig. 5, at a distance from the bottom of the socket equal to the width of the end rail B. The end rails are slipped into place with the lower corner of their inside edge resting against the shoulder *o*, and so soon as the fabric is strained on the frame there will be a twisting strain on said end rails, which will not only have a tendency to hold said lower corner against the shoulder beyond accidental displacement, but will also cause such a binding of the parts as to hold the corner-irons firmly on the rails, so that there is no necessity for any fastening-screws. So soon as the fabric is detached from the frame the lower inside corner of the end rail B may be raised, and the rails readily slipped out of the iron.

In order to guard against shrinkage and insure the side rails and end rails pressing firmly together, a small cam, *p*, is placed at the bottom of the socket *n*, so that by applying a wrench to the end of its axle, the cam may be turned to force the side rail firmly up against the end rail. The corner-irons *e* are substantially the same as E, except the cam *p* is not present and a tenon is added. These corner-irons may be used in connection with any style or kind of fabric that is strained upon a frame.

We are aware that corner-irons for bed-bottom frames dissimilar to ours are old that is to say, they have been made with a socket to receive the end rails, and a socket standing at right angles thereto to receive the side rails, and with the said sockets opening into each other; but the socket for the end rails inclosed the end of the rail on its top and two edges, so that it was impossible to use said corner-irons with side rails having the shoulder *o* in their top edge, because the socket so held the end rails that their inner edge could not be tilted to put the frame together or to detach the several irons and rails.

We believe that we were the first who ever employed the shoulder *o* on the top edge of the side rails in the manner described; that we were the first who ever set up a portable bed-bottom frame with corner-irons without the aid of fastening screws or bolts, or that ever devised practical means of any kind by which the same could be effectuated; and that we were the first to employ a cam in a corner-iron to follow up the shrinkage of the rails.

We claim as our invention —

1. In a bed-bottom, the fabric of which is composed of long helical strands, with the coils of the strands taking into each other, the woven-wire fabric having the helical strands divided into groups at the end, and each group provided with clasps for attachment to the end rails, substantially as described, and for the purpose specified.

2. The peculiar corner-irons E, provided with sockets *m* and *n*, opening into each other, in combination with the cam *p*, whereby the shrinkage of the side rails may be compensated for, substantially as described.

3. The combination of the corner-irons having sockets *m* and *n*, the socket *m* embracing only the outer edge of the end rail, the end rails B B, side rails C C, having shoulder *o*, and the fabric, substantially as described, and for the purpose specified.

THOMAS TRACY.
JOHN N. TRACY.

Witnesses:
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WILL. B. THOMSON.