

(No Model.)

J. S. GEORGE.
SLAT AND WIRE FABRIC.

No. 527,550.

Patented Oct. 16, 1894.

Fig. 1.

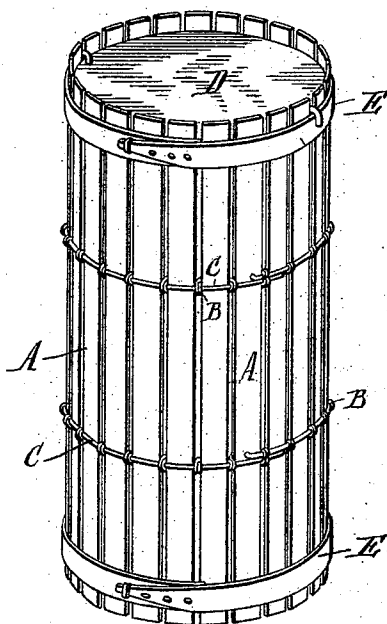


Fig. 2.



Fig. 4.

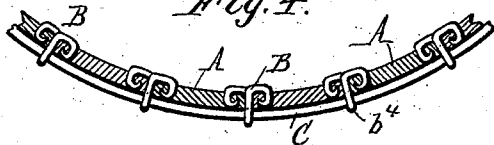


Fig. 7.

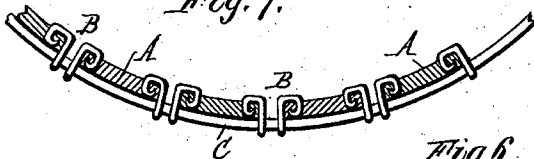


Fig. 6.

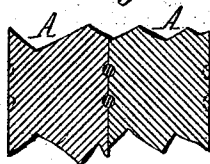


Fig. 3.

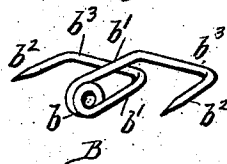


Fig. 5.



Fig. 8.



WITNESSES:

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SLAT-AND-WIRE FABRIC.

SPECIFICATION forming part of Letters Patent No. 527,550, dated October 16, 1894.

Application filed July 19, 1894. Serial No. 517,982. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. GEORGE, a citizen of the United States, residing at the city of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Slat-and-Wire Fabrics, of which the following is a specification.

This invention relates to the slat and wire fabrics which are employed more especially in the construction of packing and storing vessels, such for instance, as ventilated barrels and baskets.

My invention has for its object to produce an inexpensive fabric of this kind which possesses the necessary flexibility to permit it to be bent into the form of a barrel or similar package and which presents no internal projections that are liable to bruise or otherwise damage the contents of the vessel.

In the accompanying drawings:—Figure 1 is a perspective view of a ventilated barrel having its body constructed of my improved fabric. Fig. 2 is a fragmentary cross section of the barrel. Fig. 3 is an enlarged perspective view of one of the staples whereby the slats of the fabric are connected. Fig. 4 is a fragmentary cross section of a tight barrel embodying my invention. Fig. 5 is a perspective view of one of the staples employed for a tight barrel. Fig. 6 is a vertical longitudinal section of a pair of contiguous slats of a tight barrel, showing the indentations formed in the edges of the slats by the staples. Fig. 7 is a fragmentary cross section of a ventilated barrel, showing another modified form of the staples. Fig. 8 is a perspective view of one of said staples.

Like letters of reference refer to like parts in the several figures.

My improved fabric consists of a series of slats A arranged side by side and connected together at their longitudinal edges by staples B. When the fabric is to be used for constructing the body of a ventilated barrel, or one in which the slats are separated by air spaces, these staples are preferably constructed as shown in Figs. 1, 2 and 3. Each of these staples consists of a vertical coil or eye b arranged between the edges of adjacent slats and projecting beyond the outer side thereof, inwardly extending branches b' , legs

or spurs b^2 arranged substantially parallel with the eye and passing outwardly through the edge-portion of the slats, and transverse bars or members b^3 connecting the eye-branches with the staple-legs and bearing against the inner surface of the slats. The legs or spurs of the staples are preferably long enough to pass through the slats and their ends or points are clinched on the outer side of the slats, as shown. In the barrel shown in Fig. 1, two rows of staples are employed, arranged respectively near the upper and lower ends of the slats.

C C represent transverse binding wires applied to the outer sides of the slats and passing through the projecting eyes of the staples.

In constructing a barrel from my improved fabric, a piece of sufficient length to form the body of the barrel is bent into the desired cylindrical, or other form, and the meeting end-slats are then united by driving the projecting ends of the binding wires into said slats, as shown in Fig. 1, or by any other suitable means, after which the heads D are inserted in the ends of the barrel and held in place by the usual hoops E. By constructing the eyes b in the form of coils, as shown, the same are increased in width, thus separating the slats sufficiently to form ventilating spaces between them.

If a tight vessel or package is desired, the slats of the fabric are arranged closely together, as shown in Fig. 4. In this case, the eyes or loops of the staples are preferably constructed of a single thickness of wire, as clearly shown at b^4 in Fig. 5. In building up the fabric the slats are driven closely against each other before the staples are driven into the slats, so that the branches of the loops embed themselves in the contiguous edges of the slats, as shown in Fig. 6. In this construction of the staples, their legs or spurs are arranged on opposite sides of the loop and parallel therewith, as in the first described construction.

In the modified construction of the fabric shown in Figs. 7 and 8, the slats are provided at their adjacent longitudinal edges with separate staples arranged directly opposite each other, so that each binding wire passes through two staples of the same slat. The

two legs of each staple are in this construction arranged one above the other and on the same side of the staple loop, and they are bent in a parallel plane with the loop and connected
5 with its branches by transverse bars or members, as in the previously-described constructions.

In all of the various constructions described, the staple legs pass through the body
10 of the slat, and are connected with the eye or loop portions of the staples by transverse portions which bear against the inner sides of the slats, thus effectually securing the staples to the slats. In driving the staple-legs through
15 the slats, the transverse connecting portions are embedded in the inner surface of the slats and they therefore project but slightly, if at all, beyond the inner surface of the slats. The inner surface of the barrel or package is thus
20 practically smooth, rendering it especially suitable for shipping fruit, vegetables and other material which are liable to be bruised or damaged by sharp or prominent projections on the inside of the barrel. As the staples do
25 not extend across the full width of the slats, but are engaged only with the edge portions thereof, they permit considerable flexion of the fabric without breaking the staples or bending them out of place. The staples are
30 readily bent from a single piece of wire, rendering the same comparatively inexpensive.

My improved fabric is especially desirable for constructing barrels and other shipping

or storing packages, but it may also be used for other purposes, such for example as fences. 35

In very small or light packages in which each staple penetrates and connects two adjacent slats, as shown in Figs. 2 and 4, the binding wire C may be omitted.

I claim as my invention—

1. In a slat fabric, the combination with the slats, of staples penetrating adjacent slats to connect the same and provided between the slats with projecting loops, and a binding wire passing through the loops of the staples, substantially as set forth. 40 45

2. In a slat fabric, the combination with the slats and binding wire, of staples, each having a projecting loop at the edge of the slat, a leg arranged substantially parallel with the loop and penetrating the slat, and a member connecting the leg with the loop and bearing against the inner side of the slat, substantially as set forth. 50

3. In a slat fabric, the combination with the slats, of staples penetrating adjacent slats and connecting the same, each staple being provided with a coiled eye whereby the slats are separated, and a binding wire passing through the eyes of the staples, substantially as set forth. 55 60

Witness my hand this 12th day of July, 1894.

JOHN S. GEORGE.

Witnesses:

CARL F. GEYER,

ELLA R. DEAN.