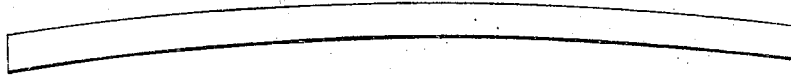


L. REED.  
HEAD LINING FOR BARRELS.

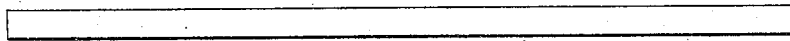
No. 188,483.

Patented March 20, 1877.

*Fig. 1.*



*Fig. 2.*



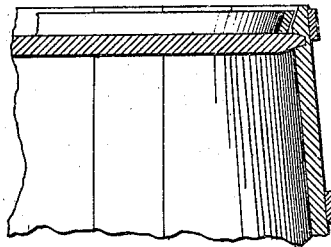
*Fig. 3.*



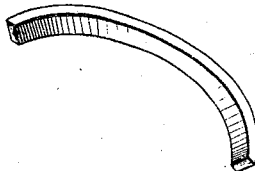
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



*Witnesses.*

*L. Watson.*

*G. B. Selden.*

*Inventor.*

*Louis Reed.*

# UNITED STATES PATENT OFFICE

LOUIS REED, OF NEW YORK, N. Y.

## IMPROVEMENT IN HEAD-LININGS FOR BARRELS.

Specification forming part of Letters Patent No. 188,483, dated March 20, 1877; application filed November 11, 1876.

*To all whom it may concern:*

Be it known that I, LOUIS REED, of the city, county, and State of New York, have invented an Improvement in Head-Lining for Barrels, of which the following is a specification:

My invention relates to an improved head-lining for barrels; and it consists in making the head-lining of such a curved form that, as hereafter described, when applied to a barrel, it will conform itself to the chine and head more accurately than the head-lining now in use.

In the accompanying drawing, Figures 1 and 2 are, respectively, side and plan views of my improved head-lining. Figs. 3 and 4 are cross-sections of the same; and Fig. 5 is a central section of a portion of a barrel, showing the head-lining in place, and fitted to the chine and head. Fig. 6 is a perspective view of my head-lining when prepared for use, as hereafter described.

My head-lining is made of a curved shape edgewise, as represented in the drawing, Fig. 1, and is adapted for use by bending it flatwise. It is applied to a barrel by placing the lower or concave edge in Fig. 1 on the head, and the convex back of the lining against the chine, and it is then ready to be nailed in place, as commonly practiced.

In consequence of the curved shape of the lining, its upper edge flares outward, and adapts itself closely throughout its length to the chine of the barrel, as shown in Fig. 5. When the back of the ordinary straight lining is placed in position against the chine, the ends of the lining turn upward from the head, while my linings, on account of their shape, fit both the head and the chine closely.

My linings may be made square in section, (see Fig. 3,) or the curved edges may be more

or less inclined to the straight sides, making the lining rhomboidal in cross-section, as shown in Fig. 4, in which case the linings will fit better to the head, as in Fig. 5.

My linings may be made in several ways. One method is to take a sawed, sliced, or rotary-cut sheet of suitable width and thickness, and divide it into strips of the proper width for linings by a curved reciprocating knife. Linings resembling Fig. 4 in section may be made in this way by inclining the table over which the sheet is fed.

Another mode of making my linings is by slitting sheets of proper width and thickness by means of a gang of saws, which may be either straight or dishing. By inclining the supporting-table to the saws the linings are cut of the form shown in Fig. 4. The sheets are trimmed to the desired curve on one edge, and this edge is held against a stationary guide in any convenient manner while the sheet is being slit into strips. By this method, also, my linings may be cut with an ordinary head-lining machine, consisting of two rollers, one of which is provided with circular knives. If the knife-carrying roller in this machine be made conical, curved linings may be cut with it, resembling Fig. 4 in section.

My head-lining is prepared for market by crimping and bundling, as in the ordinary method of crimping and bundling barrel-hoops.

I do not claim herein anything described in my Patent No. 147,284.

I claim—

The herein-described curved head-lining, rhomboidal in cross-section, substantially as set forth.

LOUIS REED.

Witnesses:

H. R. SELDEN,  
G. B. SELDEN.