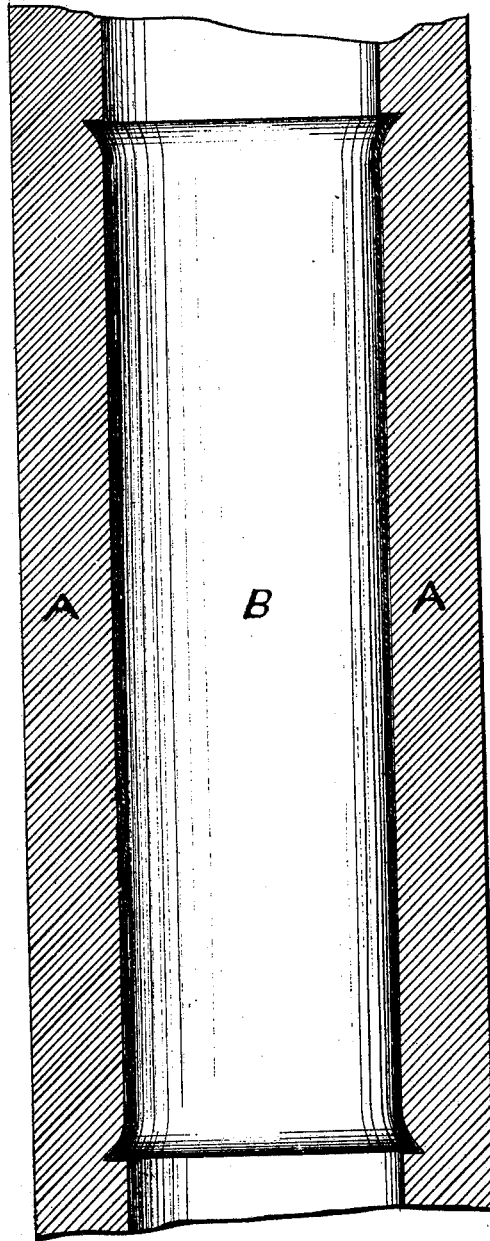


N. T. Coffin,

Patent.

No. 112,018.

Patented Feb. 21. 1871.



WITNESSES.

Wm. H. Knifler
John Pollitt.

Nathan T. Coffin INVENTOR.

United States Patent Office.

NATHAN T. COFFIN, OF KNIGHTSTOWN, INDIANA.

Letters Patent No. 112,018, dated February 21, 1871.

IMPROVEMENT IN PUMPS.

The Schedule referred to in these Letters Patent and making part of the same.

I, NATHAN T. COFFIN, of Knightstown, in the county of Henry and State of Indiana, have invented certain Improvements in the Mode of Securing Sheet-Metal Lining in Wooden Pump-Stocks, of which the following is a specification.

Nature and Objects of the Invention.

My invention relates to the sheet-metal lining of the interior of that part of wooden pumps in which the reciprocating-piston works; and

It consists in turning or flanging the ends of the sheet-metal tube forming the lining into grooves cut in the stock for the purpose of securing the lining at both ends therein, the object being to provide a smooth chamber for the piston to work in, and to avoid use of nails to secure the lining, which are liable to work loose and wear the piston-packing, and also to avoid the expensive and imperfect method of constructing a separate cylinder to contain the lining, which is secured therein at one end only, as is sometimes done, and which is liable to become loose.

Description of the Accompanying Drawing.

The drawing represents a transverse vertical section of that part of the pump-stock in which the lining is situated.

General Description.

A is the pump-stock, and B, the sheet-metal lining of that part of the stock in which the reciprocating piston works.

The lining is secured in its position by flanging or turning each of the ends of the tube into grooves cut in the stock, as shown.

By this means the lining is firmly and permanently secured from being displaced, and is at the same time left smooth and entirely free from all obstructions that would fret or wear the piston-packing.

I make no claim to lining wooden pump-stocks with sheet metal, as this is in common use.

Claim.

I claim as my invention—

The sheet-metal lining B, secured in the interior of the wooden stock A by turning or flanging the ends of the tube forming the lining into grooves cut in the stock, substantially as set forth.

NATHAN T. COFFIN.

Witnesses:

DAN. W. KNEFLER,
O. F. MAYHEW.