UNITED STATES PATENT OFFICE.

WILLIAM M. DEUTSCH, OF ELIZABETH, AND CHARLES O. KANOUSE, OF NEWARK, ASSIGNORS OF ONE-THIRD OF THEIR RIGHT TO ALFRED N. LEWIS, OF NEWARK, NEW JERSEY.

MANUFACTURE OF CELLULOID-COATED DRUM-HEADS.

SPECIFICATION forming part of Letters Patent No. 233,604, dated October 26, 1880.

Application filed July 9, 1880. (No specimen.)

To all whom it may concern:

Be it known that we, WILLIAM MILLAR DEUTSCH, of Elizabeth, in the county of Union and State of New Jersey, and CHARLES O. KANOUSE, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in the Manufacture of Celluloid-Coated Drum-Heads, of which the following is a specification.

Our invention relates to the manufacture of drum-heads; and it consists in treating heads in a crude or finished state, of any materials of which heads may be made, on one or both sides, with a coating of celluloid or other pyroxyline, and by any common process; and in doing so we render them water-proof, so that they will not be affected by change of air or temperature, and can therefore be used the same in wet or dry weather, as there will be no loosening or shrinking in either, and when once tightened will remain the same, and need not be loosened. The sound is much improved and the goods can be made at less cost, as cheaper material may be used for the base, and yet we make an article of greater value.

We claim—

In the manufacture of drum-heads, one or both surfaces treated with a coating of celluloid or other pyroxyline, substantially as and for the purpose specified.

WILLIAM MILLAR DEUTSCH.
CHARLES O. KANOUSE.

Witnesses:
HORACE HARRIS,
ALFRED N. LEWIS.