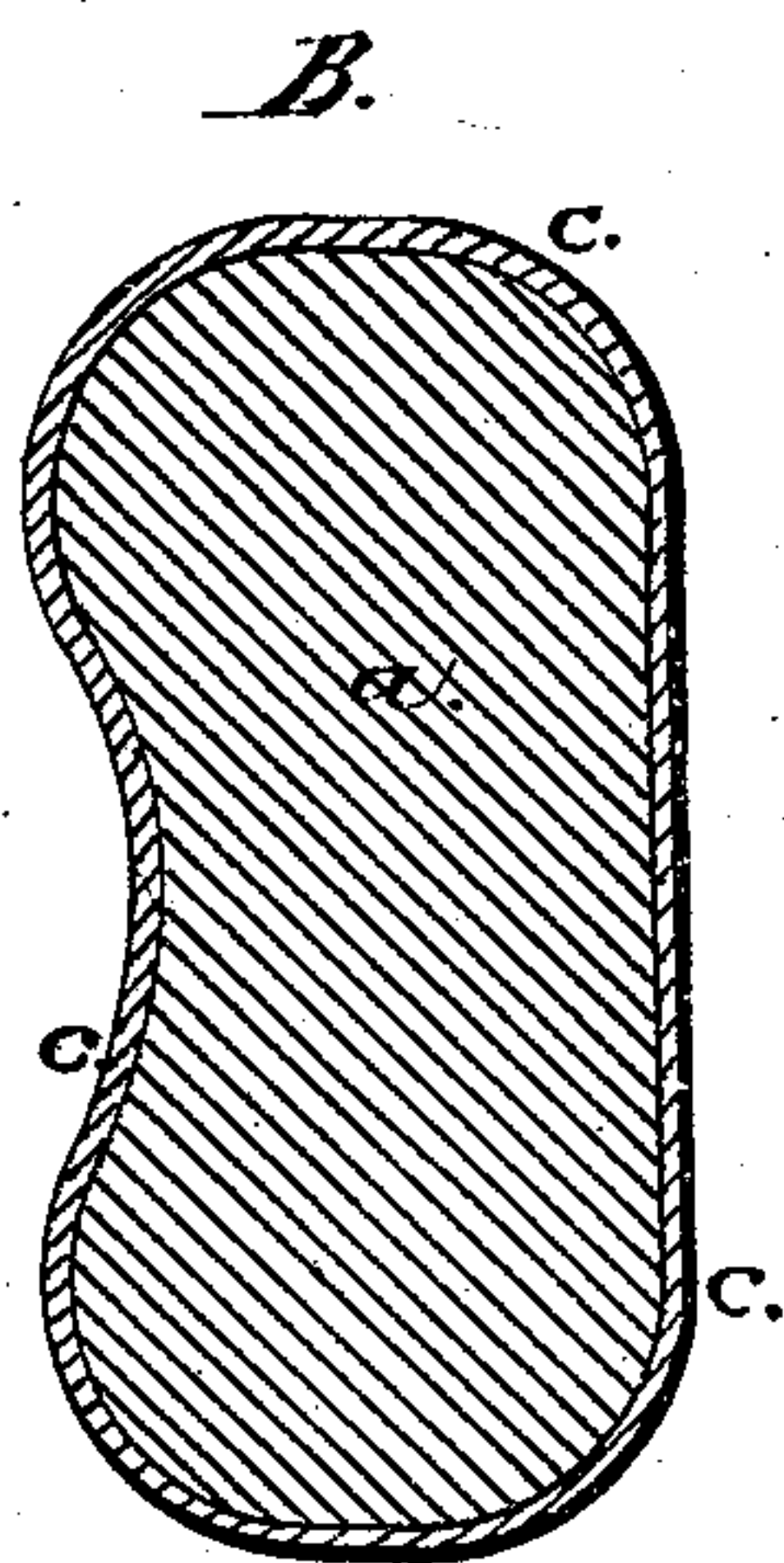
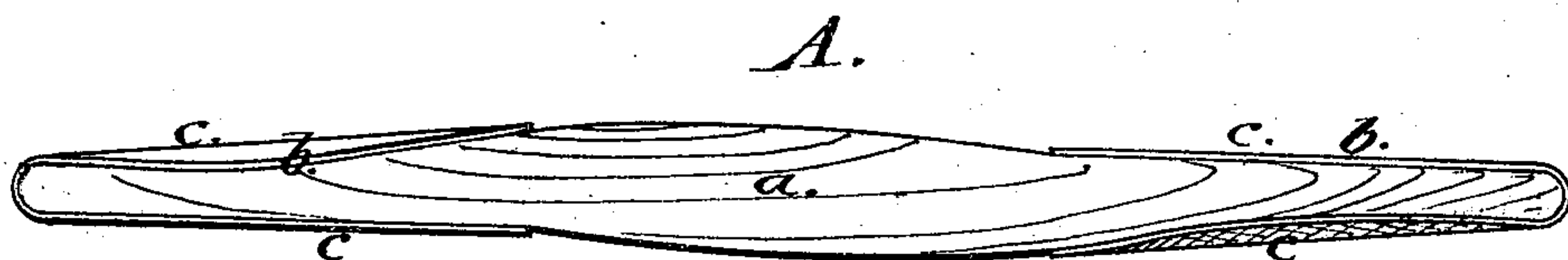


*D. P. Butler.*

*Lifting-Bar.*

*Nº 92,792.*

*Patented Jul. 20. 1869.*



*attest:*  
*C. Warren Brown,*  
*L. H. Calina,*

*Inventor:*  
*D. P. Butler*  
*By his Atty*  
*Crosby, Halsted & Gould,*

# United States Patent Office.

D. P. BUTLER, OF BOSTON, MASSACHUSETTS.

*Letters Patent No. 92,792, dated July 20, 1869.*

## IMPROVEMENT IN LIFTING-BARS.

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

### *To all whom it may concern:*

Be it known that I, D. P. BUTLER, of Boston, in the county of Suffolk, and State of Massachusetts, have invented an Improved Handle for Lifting-Apparatus, &c.; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention, sufficient to enable those skilled in the art to practise it.

In the use of hygienic lifting-apparatus, it is very difficult to obtain handles having surfaces, not only properly shaped for the grasp of the hands, but upon which the hands will not slide; the nearest approach to a perfect handle for this purpose having been a handle surfaced with buckskin, and this soon wears smooth and becomes slippery, is not enduring, cannot be readily brought to the irregular form which it is requisite for such a handle to have, to enable a firm and tenacious grasp to be maintained, and the seam made by the lapping edges of the buckskin is always liable to open, and generally presents an objectionable ridge or protrusion.

After much thought and many experiments, extending over a series of years, I have at last produced a handle which is free from all of these defects, and which embraces everything that is needed in the hand-holding ends of a lifting-bar, so far as relates to grasping-surfaces.

My invention consists in a handle, which, being first brought to the desired form, is covered by a thin skin or coating of rubber, or rubber compound, vulcanized directly upon the wooden body or other material of which the handle is made.

The drawing represents a lifting-bar having handles thus made.

A shows a longitudinal central section of the bar.

B, a cross-section of one of the handles.

*a* denotes the bar, which, if to be used in connection with my lifting apparatus, is formed not unlike the bar shown in my United States patent, No. 55,618, granted June 19, 1866.

*b b* denote the two handles or hand-grasping ends of the bar.

Around each of these ends, I wind, or otherwise apply a soft rubber coating, *c*, and having enveloped the whole end with the rubber, I vulcanize the rubber by heat and pressure, such vulcanization bringing the rubber into one homogeneous piece, without seam or division of any kind, and pressure upon it causing the rubber to adhere throughout, so that when finished, the rubber has permanently imparted to it the contour of the wood beneath, forming a hand-grasp to which the palm of the hand, and the inner surfaces of the fingers will cling without slipping, and which has a very slight degree of elasticity, so that it is soft or yielding to the hand. The surface thus formed is also very enduring, and never becomes displaced by grasping.

Other handles may be thus covered with rubber vulcanized directly upon them, though the invention is more particularly designed for the handles of lifting and other hygienic apparatus.

I claim the improvement in surfacing handles, substantially as and for the purpose specified.

D. P. BUTLER.

Witnesses:

J. B. CROSBY,  
FRANCIS GOULD.