H. Lindeman,

Piano,

No. 29,502. Patented Aug. 7, 1860.

Fig. 1.

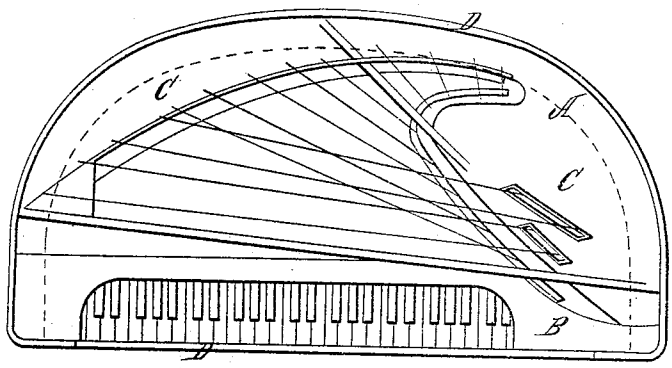
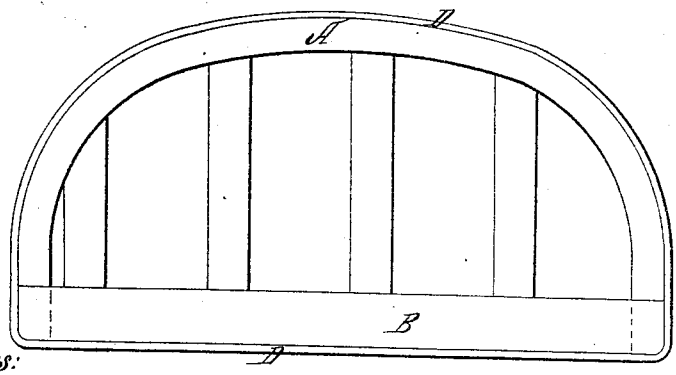


Fig. 2.



Witnesses:

Henry C. Bowden

Louis Hoch

Inventor:

Herman Lindeman

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

HERRMAN LINDEMAN, OF NEW YORK, N. Y.

PIANO-FORTE.

Specification forming part of Letters Patent No. **29,502**, dated August 7, 1860.

To all whom it may concern:

Be it known that I, HERRMAN LINDEMAN, of New York, in the county and State of New York, have invented a new and useful Improvement in Piano-Fortes; and I hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I represents a top view, and Fig. II a bottom view, of my improved piano.

The nature of my invention consists in constructing the long and cross blocks of a piano-forte of a regular arched or cycloid-curved structure, which may be made of wood or any other material of the required strength, and whereby the instrument can be made lighter, smaller, and circular at the back and sides.

In the accompanying drawings, A represents the curved or arched structure, which becomes a substitute for the long and cross blocks. The same is made of a number of thin boards or veneers, being bent round a form of the required curve and glued to each other and then tied together near the front by the brace B in such a manner that the two sides and the back shall form a regular and continued curve. Instead of forming the sides and back of one piece and tying the front ends together by a brace, this structure may be continued round the front part and then cut out in the front for the key-board. Upon this structure A or substitute for the long and cross blocks the "tuning-block" is fastened, covered by the iron or metal plate C and constructed in the usual manner, except that the outer shape corresponds with the shape of the structure A. Outside of the structure A the covering D is fastened and finished in the usual manner, giving thereby a circular appearance to the instrument at the back and at the sides. By this curved structure the immense strain of the strings is more easily resisted, while at the same time pianos can be made much smaller and lighter, as the long and cross blocks now in use are for the purpose of obtaining the required strength to withstand this immense strain, of necessity placed in such positions as to occupy space, which this improvement dispenses with. This arched or curved structure may likewise be placed in a square piano or in a piano-case having straight sides with rounded corners, as well as in an upright or boudoir piano.

What I claim as my invention, and desire to secure by Letters Patent, is—

The arrangement and construction of a curved or arched structure as a substitute for the long and cross blocks now in use, in the manner and for the purpose substantially as described.

HERRMAN LINDEMAN.

Witnesses:

HENRY E. ROEDBR,

LOUIS KOCH.