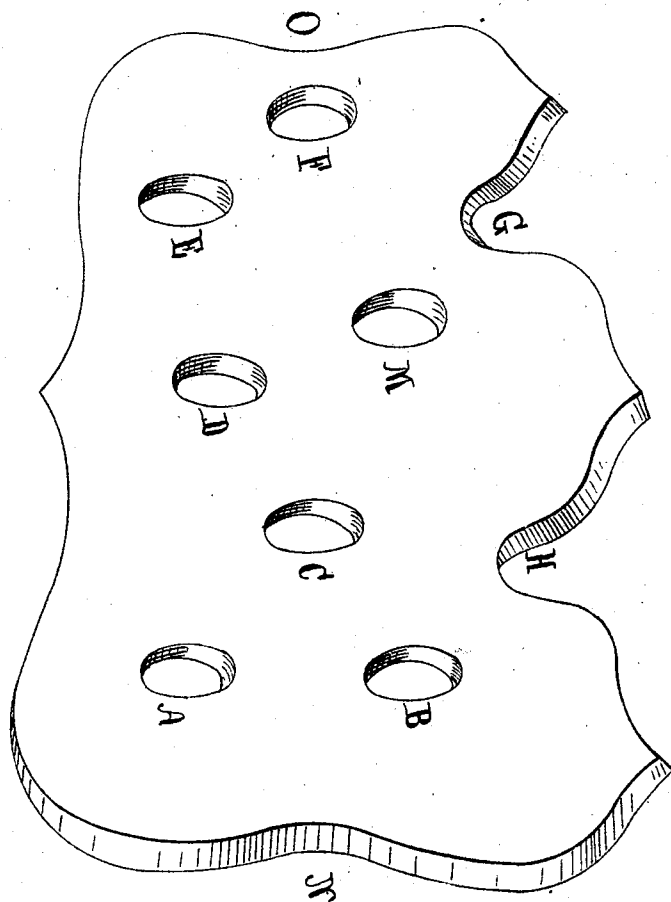


HELENA P. DEBRUYN KOPS.

Improvement in Apparatus for Development of the Muscles of the Hands.

No. 121,289

Patented Nov. 28, 1871.



Witnesses,
Clarence Nevofil

J. J. Vanderhoer

Inventor,

H. P. de Bruyn Kops

UNITED STATES PATENT OFFICE.

HELENA P. DE BRUYN KOPS, OF NEW YORK, N. Y.

IMPROVEMENT IN APPARATUS FOR DEVELOPMENT OF THE MUSCLES OF THE HANDS.

Specification forming part of Letters Patent No. 121,289, dated November 28, 1871; antedated November 18, 1871.

To all whom it may concern:

Be it known that I, HELENA P. DE BRUYN KOPS, of the city, county, and State of New York, have invented a Machine or Contrivance for the Development of the Muscles of the Hand, especially adapted to strengthen the fingers, thereby promoting facility of execution both on violin and piano.

My invention consists of a board, as hereinafter described, with indented edges and holes in it, so arranged as to admit of various exercises for the fingers, for giving ease of movement, and for strengthening and developing the muscles of the hand and wrist.

This instrument consists of a piece of smooth board, which may be made of wood, India rubber, vulcanite, papier maché, or other suitable material, about six or seven inches long by four or five inches wide and one-fourth to one-eighth inch thick; but it may be of any convenient size, pierced with holes, as A B C D E F M, of a size to admit the fingers, at various points suggested by practice and experience, and the edges curved, as O G H N, so that the greatest effect may be produced in the exercises adapted to each and all of the fingers.

That any one may know how to use it, the following description (with reference to the draw-

ing) of a few of the exercises it is intended for will be sufficient.

Thus, with the first finger or thumb in A, a primary exercise for strengthening the first and second fingers is obtained by gradually extending the second finger along the outer curves, commencing with the shortest radius involving an extension, until it reaches F or the outer edge at O. A child or person whose fingers are not limber can soon learn to stretch an octave by putting first finger or thumb in A and extending the fifth toward E, F, and finally outer edge. An excellent exercise for fourth finger, the weakest and least manageable, is to put third finger in D, fourth in G, and fifth in F. When this becomes easy the same position can be obtained by turning the instrument and putting the fifth finger in A, the fourth in H, and third in D. These exercises can be multiplied *ad libitum*.

What I claim is—

The instrument or apparatus constructed with indented edges and perforations, substantially as and for the purpose set forth.

HELENA P. DE BRUYN KOPS.

Witnesses:

CLARENCE MORFIT,
JOHN JAMES VAN DE MOER.

(143)