

E. B. KURSHEEDT.
FINGER EXERCISING DEVICE.
APPLICATION FILED AUG. 3, 1905.

Fig. 1,

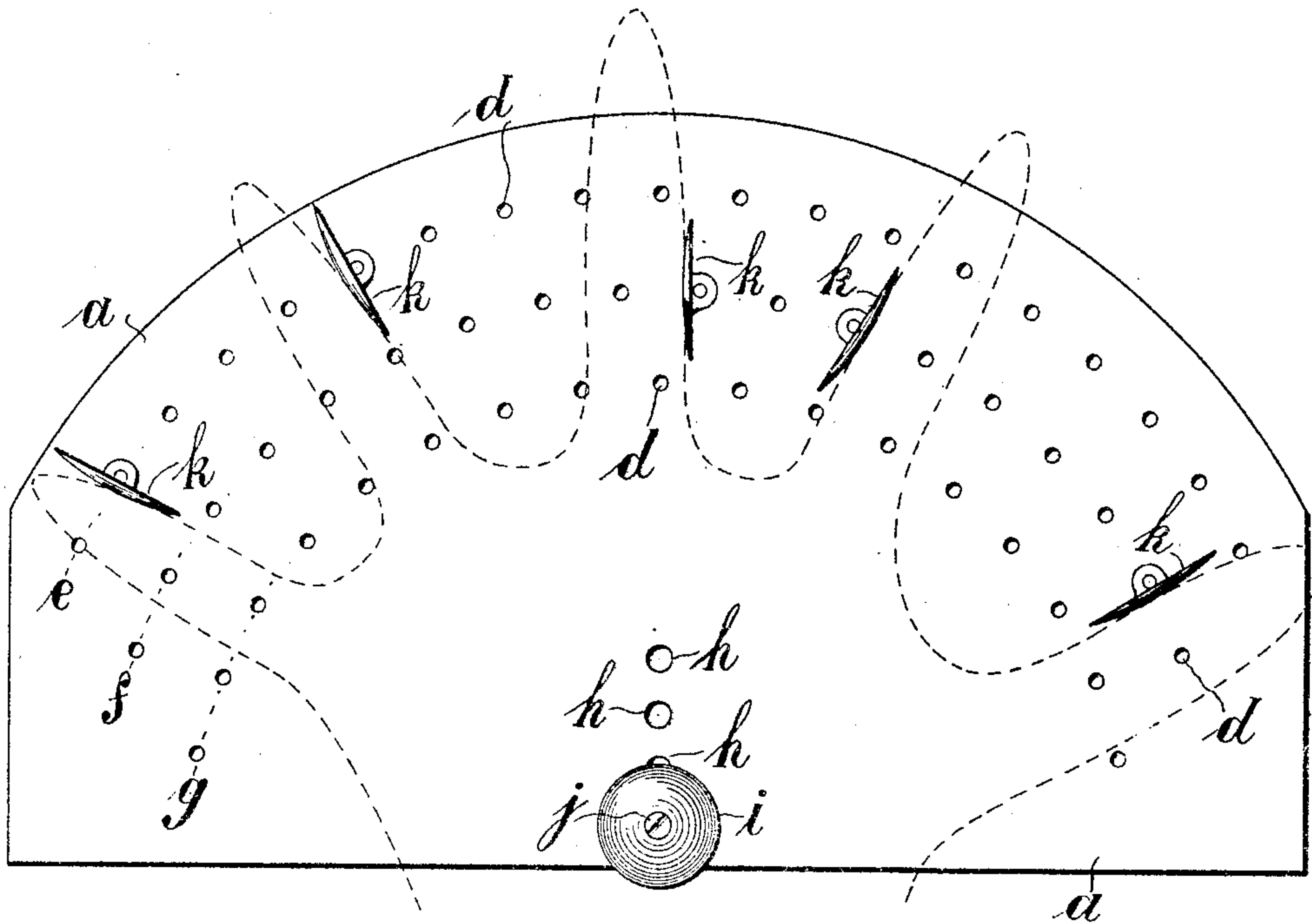


Fig. 2,

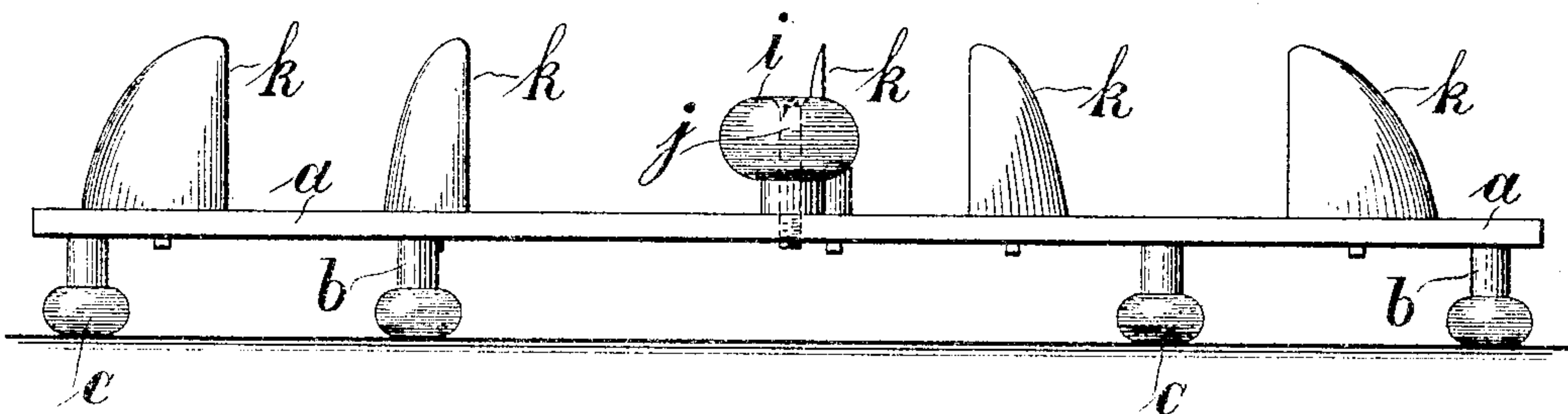
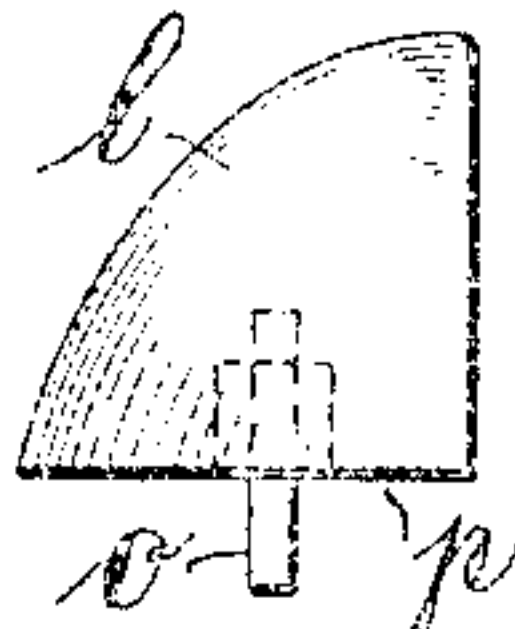
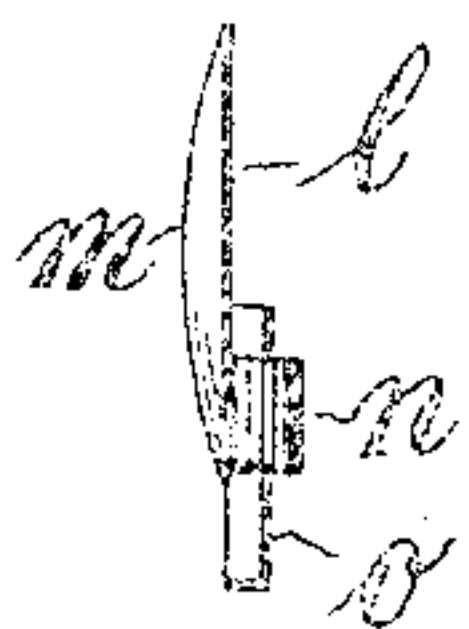


Fig. 3,

Fig. 4.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDMUND B. KURSHEEDT, OF EAST ORANGE, NEW JERSEY.

FINGER-EXERCISING DEVICE.

No. 806,681.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed August 3, 1905. Serial No. 272,480.

To all whom it may concern:

Be it known that I, EDMUND B. KURSHEEDT, a citizen of the United States of America, and a resident of East Orange, in the county of Essex, State of New Jersey, have invented certain new and useful Improvements in Finger-Exercising Devices, of which the following is a specification.

This invention has reference to a novel finger-exercising device or hand-expander, and relates particularly to a novel device for exercising and spreading the fingers for the purpose of making them nimble and increasing their lateral reach, which is desirable for playing musical instruments, particularly pianos and string instruments. When a pupil starts to take lessons in piano-playing, then the fingers are rather stiff and their lateral reach is limited. By continued practice and playing the fingers become nimble, quickly-moving, and their lateral reach is greatly extended in the course of time. However, it may take several years to accomplish this result.

It is the purpose of this invention to provide a finger-exercising device or hand-expander by the use of which the fingers will attain the same nimbleness, agility, and extended lateral reach within a few weeks which formerly required several years.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 illustrates in top plan view a finger-exercising device which embodies my invention. Fig. 2 represents the device in front elevation. Fig. 3 shows in side elevation a finger-plate, and Fig. 4 illustrates same in front elevation.

Similar characters of reference denote like parts in all the figures.

The finger-exercising device consists, essentially, of a strong base-plate *a*, which is preferably made of metal and may be electroplated, so as to enhance its appearance. The base-plate *a*, however, may also be made of wood or rubber compositions and the like and then polished. The base-plate rests on a number of short supports *b*, which have rubber buttons *c* at the bottom, so as not to injure, for instance, a table on which it is placed. Three or more supports are provided. In Fig. 2 of the drawings four such supports are illustrated. The plate *a* is provided with a large number of openings *d*, arranged in segmental and parallel series. Three of such series *e f g* are illustrated in Fig. 1; but four or five

series of openings are quite often provided on the plate in accordance with the size of the plate and the size of the hand to be exercised. In the rear center portion of the plate and parallel to its sides there are a number of openings *h*, which have each a screw-thread. A knob *i*, having a central screw *j*, is inserted into one of the openings *h* and screwed tight. This knob *i* forms a support or rest for the hand during the exercising of the fingers. The screw *j* of the knob fits every opening *h*, and therefore the knob is an adjustable support for the hand. For large hands it is placed, for instance, in the last opening *h* in the rear of the plate, in which it is shown on the drawings. For small hands it is moved farther in, closer to the series of segmental and parallel openings.

In addition to the above-described parts the device is provided with a number of finger plates or keys *k*, of which five are usually employed. These plates are generally made of the same material as the base-plate, but preferably of metal. Each finger plate or key consists of the plate proper, *l*, which is flat in the rear and has a slightly-curved surface *m* in the front. On the lower center rear portion of the plate *l* there is a piece *n*, preferably cast thereon, and thus integral therewith, or, if desired, this piece may be soldered to the plate. The piece *n* extends vertically up and has a smooth top and bottom surface. Through the piece *n* there is a vertical opening in which a pin *o* is permanently secured. The pin *o* extends downwardly beyond the finger-plate. By means of this pin *o* the finger-plate may be secured in any of the openings *d* of the base-plate *a*, as shown in Fig. 1. The pin passes through the opening *d* and the lower surface of the piece *n*, as well as the lower surface *p* of the finger-plate proper, supports the finger-plate substantially on the base-plate *a*. By inserting the finger-plates close together and in the inner series *g* of segmental and parallel openings the hand of a child may be exercised. In subsequent exercises the finger-plates are gradually set farther apart. For a large hand the finger-plates are accordingly inserted in the base-plate at greater distances from each other.

In operating the device the finger-plates are first inserted at a suitable distance from each other. Then the hand is placed on the supporting-knob and the fingers rested against the slightly-curved surface of the plate proper in the manner indicated in Fig. 1.

This novel finger-exercising device may be made very plainly and of inexpensive material, so as to manufacture it very cheaply, but it may also be made of expensive material, in
 5 elaborate style, and high finish, so as to produce a more beautiful apparatus.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A finger-exercising device or hand-ex-
 10 pander comprising a base-plate, a large number of openings therein arranged in a plurality of segmental and parallel series, and a number of independent finger plates or keys each adapted to be set in one of the openings
 15 in the base-plate.

2. A finger-exercising device or hand-ex-
 pander comprising a base-plate, supports se-
 cured thereto having rubber buttons at the
 bottom, a large number of openings in the
 20 front portion of said base-plate arranged in a plurality of segmental and parallel series, and a number of independent finger plates or keys each adapted to be set in one of the openings in the base-plate.

3. A finger-exercising device or hand-ex-
 25 pander comprising a base-plate, a large number of openings in its front portion arranged in a plurality of segmental and parallel series, a plurality of threaded openings in the rear
 30 center portion of the base-plate, an adjustable hand-support or knob with central screw adapted to be applied in each of the threaded openings, and a number of finger-plates each adapted to be set in one of the openings in
 35 the front portion of the base-plate.

4. A finger-exercising device comprising a
 base-plate, supports secured thereto having
 each a rubber button at the bottom, a large
 number of openings in the front portion of
 40 said base-plate arranged in a plurality of segmental and parallel series, and a number of threaded openings in the rear center portion of the base-plate, an adjustable hand-support or knob with central screw adapted to be se-

cured in each of the threaded openings, and a 45
 number of finger-plates each adapted to be set in one of the openings in the front portion of the base-plate.

5. A finger-exercising device comprising a
 base-plate, having supports below, a large 50
 number of openings in the front portion, and a plurality of threaded openings in the rear center portion, an adjustable hand-support or knob with central screw adapted to be applied in each of the threaded openings, and a plu- 55
 rality of finger-plates each adapted to be set in one of the openings in the front portion of the base-plate.

6. A finger-exercising device comprising a
 base-plate with openings in the front portion, 60
 threaded openings in its rear center portion, an adjustable hand-support adapted to be applied in the threaded openings, and a number of finger-plates consisting each of the finger-
 plate proper having a slightly-curved front 65
 portion, an integral piece on its lower rear surface in the center, and a pin in said piece extending downwardly and adapted to be inserted in the front openings of the base-plate.

7. A finger-exercising device comprising a 70
 base-plate with supports below, openings in the front portion, threaded openings in its rear center portion, an adjustable hand-support adapted to be applied in the threaded open-
 ings and a number of finger-plates consisting 75
 each of the finger-plate proper having a slightly-curved front surface, an integral piece on its lower rear surface in the center, and a pin in said piece extending downwardly and adapted to be inserted in the front open- 80
 ings of the base-plate.

Signed at New York, N. Y., this 31st day of July, 1905.

EDMUND B. KURSHEEDT.

Witnesses:

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