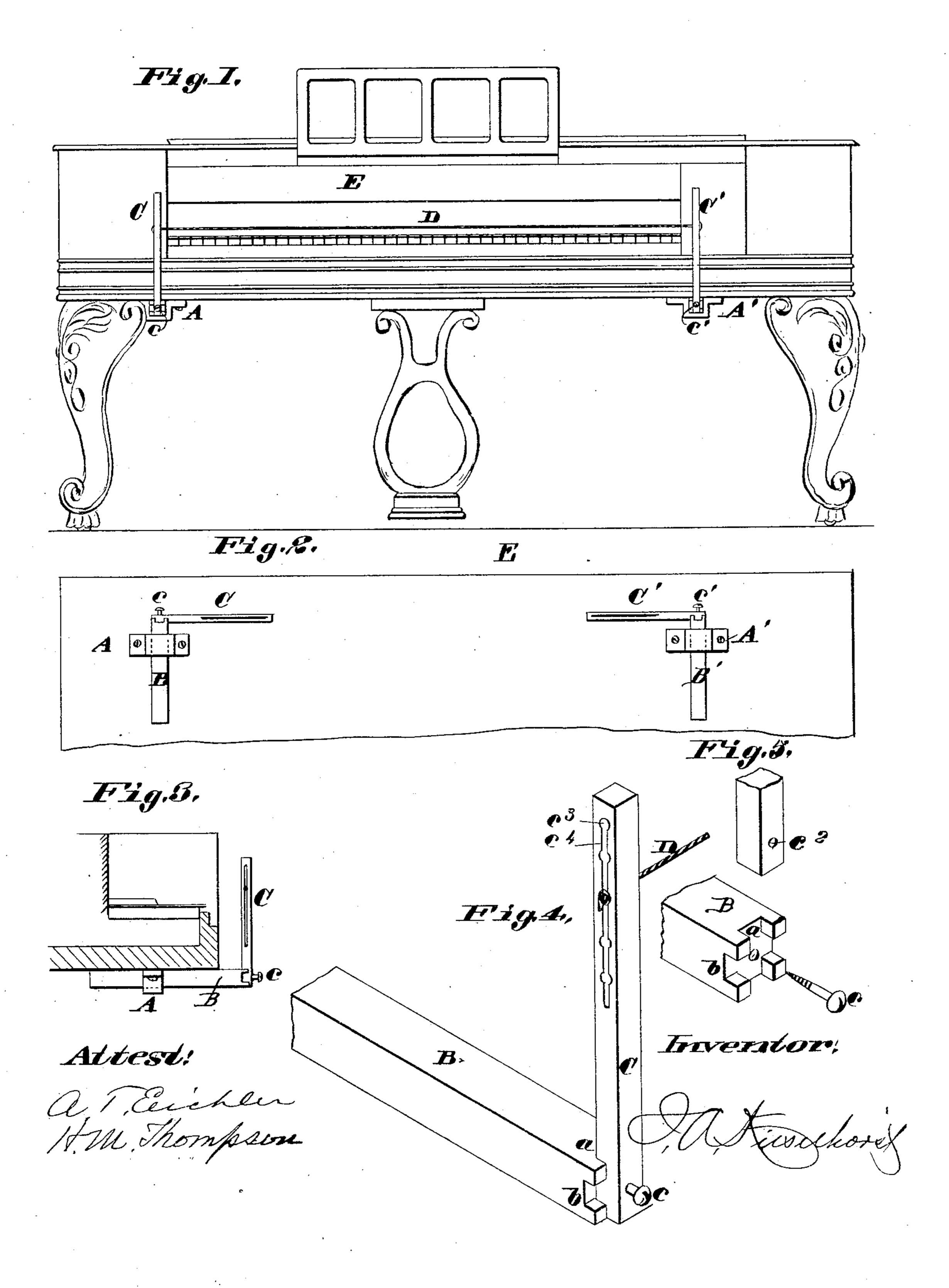
J. A. KIESELHORST.

PIANO PUPIL'S MONITOR.

No. 313,502.

Patented Mar. 10, 1885.



United States Patent Office.

JOHN A. KIESELHORST, OF ST. LOUIS, MISSOURI.

PIANO-PUPIL'S MONITOR.

SPECIFICATION forming part of Letters Patent No. 313,502, dated March 10, 1885.

Application filed December 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, John A. Kieselhorst, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented a new and useful Improvement in Piano-Forte-Pupils' Monitors, of which the following is a specification.

My invention relates to devices for use in musical instruction, to aid the pupil in keeping the hands and wrists in the proper position; and it consists in the device constructed and described, as herein set forth and claimed. I attain this object by the mechanism illustrated in the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a front elevation of a piano with my device attached for use. Fig. 2 is a detailed bottom view with the standard-arms folded down and slid out of sight beneath a piano. Fig. 3 is a transverse vertical section through the key-board. Fig. 4 is a perspective view of the bracket-arms. Fig. 5 is a detailed perspective view of the socket and parts detached.

Similar letters refer to similar parts in all the views.

Any suitable material may be made use of in its construction.

In order to support and hold taut the elastic 30 cord used, and also to admit of its removal from any position it may be in while in use to another position for hiding it out of sight, I make use of the following device: Two slotted blocks or lugs, A A', are secured to the 35 bottom of a piano, E, Figs. 1 and 2, one of them near each end of the key-board, to support and form recesses, in which the sliding arms B B', Figs. 2 and 4, are loosely placed, so they may be slid endwise backward or for-40 ward for the purpose of hiding the parts from sight when not in use. These arms are square, or nearly so, and sufficiently long for sliding in or out. The front end of each is slotted vertically, as at a, and horizontally, as at b, 45 Figs. 3 and 4, at right angles to each other, entirely across, and to a depth equal to about onehalf of the thickness of the arms or standards C C', Figs. 2 and 4, and wide enough to permit

these standard-arms to stand erect vertically, or to be folded down horizontally into the 50 slots a or b by sliding them out of or into these slots on the body of the long screws c c', Figs. 2 and 4. The screws c c' serve as journals, on which the standard-arms C C' turn and slide, and by which they are movably fast- 55 ened to the end of the sliders B B' through the hole c^2 , Fig. 3. The head of the screws c c'are not screwed closely against the standardarms C C'. On the contrary, they stand out from it sufficiently far to permit of sliding 60 them in or out to the depth of the slots a b, as desired. The standard-arms C C' are square and of sufficient length. They are spaced off in their upper part, and bored with holes c^3 and slots c^4 alike through them in a line 65 with the front end of the key-board, Fig. 1. When in use these arms are adjusted vertically in the slots a a' of the sliders B B', supported on the screws c c'. They form a substantial support for the elastic reminder- 70 cord D, Fig. 1, which is inserted into and held by them at any desired height in the holes c^3 and slot c^4 , Fig. 4. The flexible cord D is held taut, and stretched between the opposite arms on a line with the key-board, 75 and it may be raised or lowered in the holes c^3 and slots c^4 to any desired point for the pupil's use. Its flexibility prevents the student from resting the hands or arms on it, as is the case where metallic or wooden rods are So used for a similar purpose. The touch of the elastic cord sufficiently reminds the pupil that its hands or arms are out of proper position, without permitting them to rest on it, as if rigid.

When not in use, by pulling the standardarms C C' forward on the body of the screws cc' out of the slots ac' and turning them inwardly toward each other, then sliding them back on the screws into the horizontal slots 90 bc', the device may be pushed back and hidden from view under the piano, as shown in Fig. 2. When wanted for use, the parts are slid forward, and the arms and cord raised, as shown in Fig. 1.

I am aware that a flexible cord may be sup-

ported by other devices in a manner similar to this, and operated by weighted arms or by eccentrics.

Having sufficiently explained my device 5 and its construction and operation, what I wish to secure by Letters Patent is as follows:

The combination, with a piano-forte or

other key-board musical instruments, of the blocks A A', sliding arms B B', provided 10 with slots a b, standards C C', screws c c', and cord D, as and for the purposes set forth.

JNO. A. KIESELHORST.

Witnesses:

A. T. EICHLER, H. M. THOMPSON.