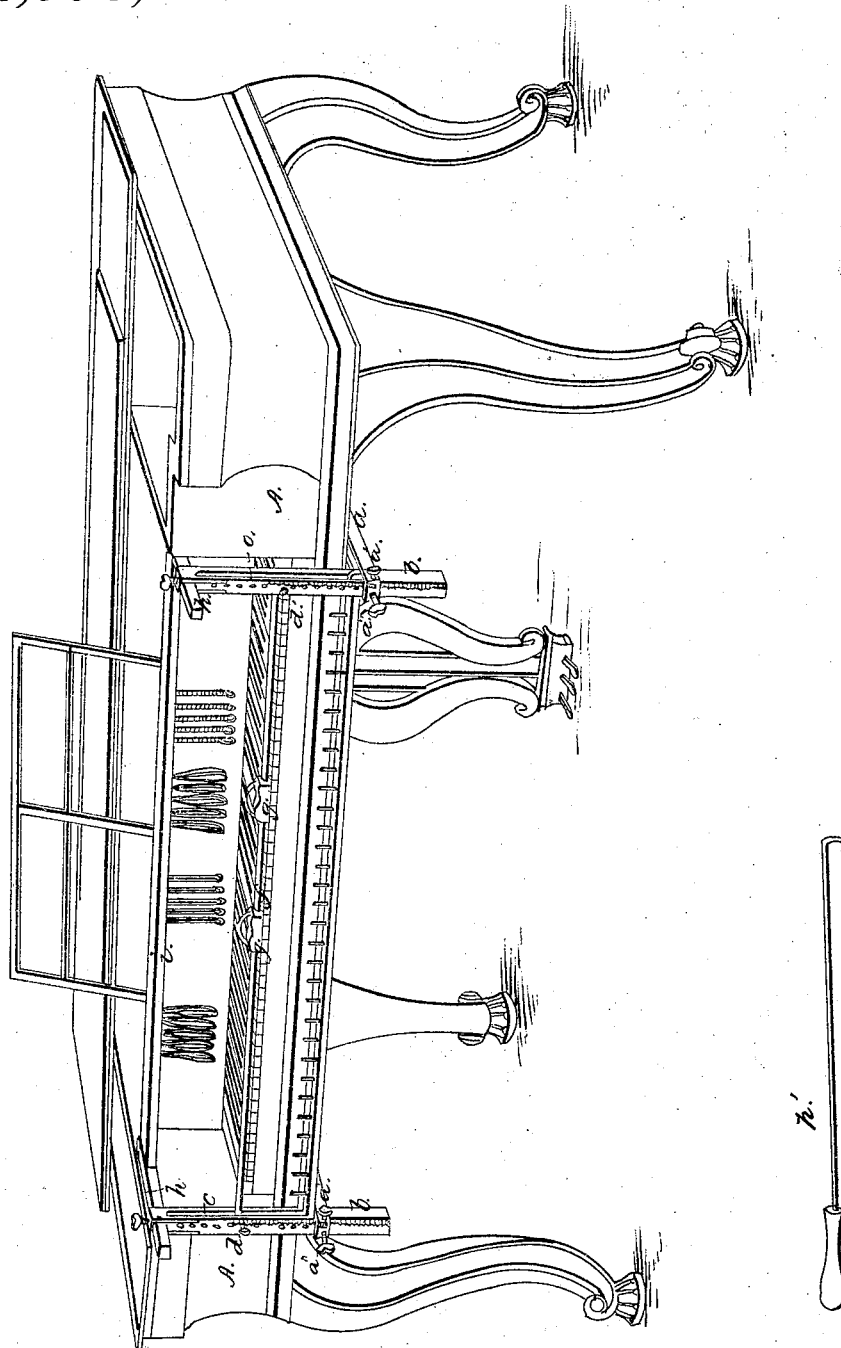


*E. Von Heeringen,*  
*Piano Attachment,*  
*Nº 6,558,      Patented June 26, 1849*



# UNITED STATES PATENT OFFICE.

ERNEST VON HEERINGEN, OF PICKENSVILLE, ALABAMA.

## INSTRUMENT FOR TEACHING MUSIC WITH THE PIANOFORTE.

Specification of Letters Patent No. 6,558, dated June 26, 1849.

*To all whom it may concern:*

Be it known that I, ERNEST VON HEERINGEN, of Pickensville, in the county of Pickens and State of Alabama, have invented a new and useful apparatus to be attached to the pianoforte to aid in learning to perform on that instrument, which I denominate a "Nolime-tangere," (touch me not,) and of which the following is a full and exact description, reference being had to the annexed drawing of the same, making part of this specification, in which—

A represents a piano forte which may be made of any of the usual forms and on the bottom of which two cleats are secured for the support of the horizontal pieces *a a* which are free to slide in or out, and are held in any given position by clamp screws attached to the cleats. On the front ends of each of the pieces *a a* a staple *a'* made of flat metal is secured, which is so arranged as to form a vertical mortise or eye in which the upright pieces *b b* fit, but not so tightly as to prevent their sliding easily up or down; in the front of these staples set screws *a''* are placed to hold the uprights *b* at any required point of elevation, and to each staple a pinion is also secured, on the outer end of the axis of which is a milled knob to turn it by, these pinions take into racks on the sides of the uprights *b*, being thus arranged for the purpose of raising and lowering the same in a more easy and convenient manner.

The uprights *b b* are long enough to reach from the horizontal pieces *a* to a point several inches above the top of the piano, in order that the upper part of the apparatus may be raised up sufficiently to allow the lid as formed in the ordinary piano to be opened and closed, these pieces have longitudinal slots *c* extending nearly their whole length and parallel to the front of the piano, a series of holes are made transversely through these slots in which pins *d* are placed for the purpose of supporting the bars *e f*, the bar *e* like the rest of the apparatus may be of various kinds of material, but I prefer to make it of wood, with a series of metallic points on its upper side, and tenons on its ends which fit into the slots *c* and slide freely up or down therein, this rod is adjusted so as to bring it immediately beneath the wrists of the pupil, and at such an elevation that when the pupil reaches over it to touch the keys, the wrists

will be elevated and the hand and arm will be in the best and most graceful position if the wrists should be unduly lowered they will of course be pricked by the points producing pain, which will sufficiently admonish the pupil to keep them up, and thus the sinking or bending down of the wrists, that most inveterate and incorrigible of all bad positions will be radically cured, and that graceful elevation of the wrists which gives such freedom to the fingers, and which is indispensable to good performing becomes a fixed habit, as does also the removal of the hands from the keys and placing them on the lap immediately upon ceasing to play, by means of the pins *d* this bar can be raised and depressed, and by sliding the pieces *a* in or out, it can be placed nearer to, or farther from the keys to suit persons of different sizes.

In the slots *c* the rod *f* is also placed, this rod is round, well polished and uniform in diameter and is for the purpose of guiding and supporting the wrist pieces *g g* which slide upon it. The wrists are placed upon these cushioned blocks and confined there by means of a strap or ribbon, so that when the fingers are moved from one octave to another, they and the arms will of necessity be kept parallel to the keys all the motion being at the shoulders; to enable the pupil to acquire these various movements the instructor takes the hooked rod *h'* and attaching it to the blocks moves the arms of the pupil backward and forward at an uniform rate while the fingers touch the keys as they pass along, by this means the pupil will very soon acquire such a degree of facility in moving the body, arms and fingers that the first, last or middle octaves will be touched with equal ease and accuracy—the height of this rod like that with the points can be regulated by moving the pins *d* on which it rests.

Upon the tops of the uprights *b* flat metallic staples are arranged in such a manner that the arms *h h* of the rod *i* will fit and slide therein, the staples being provided with clamp screws by which the arms may be held where placed.

To the rod *i* a series of gum elastic, wire, or other springs of a suitable size are attached in any convenient way, these springs being sufficiently flexible and elastic to allow the fingers of the performer which are attached to them to strike the keys by the

exertion of a little force, and then when the force is relaxed suddenly draw them up again; each finger of the performer is provided with a leathern sleeve with a ring on its upper side to which the springs are attached by hooks or otherwise, these springs being of an uniform strength, it follows that the same force must be exerted by each finger suspended to them in striking a clear and distinct note, and one finger can derive no aid from the others; by exercising the fingers in these springs they acquire a strength, freedom and independence of action and equality in power, which cannot be acquired by any other mode of training with which I am acquainted.

Weights or levers may be substituted for springs if they should be preferred by any person, but I deem the springs by far the best. The sleeves for the fingers may if it should be deemed advisable be dispensed with, and the fingers placed directly upon a hook or in a loop formed on the lower end of the springs.

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

1. The method of exercising and training the fingers of those who are learning to per-

form on the piano forte, by springs weights or other equivalent device arranged as herein set forth or in any other substantially similar manner.

2. I claim the application to the piano forte of an adjustable rod with pins, sharp points, or any other equivalent device, attached to its upper surface for the purpose of causing the wrists of the performed to be duly elevated.

3. I claim the manner of teaching pupils to move their fingers, hands, and arms below the elbow, parallel to the keys of the instrument whether playing the first, last, or middle octaves by confining the wrists to blocks which slide on a rod parallel to the front of the instrument, and adjustable to suit different performers, or any other analogous device by which similar results are produced.

In testimony whereof I have hereunto signed by name in presence of two witnesses.

E. VON HEERINGEN.

Witnesses:

P. H. WATSON,  
STEPHEN W. WOOD.