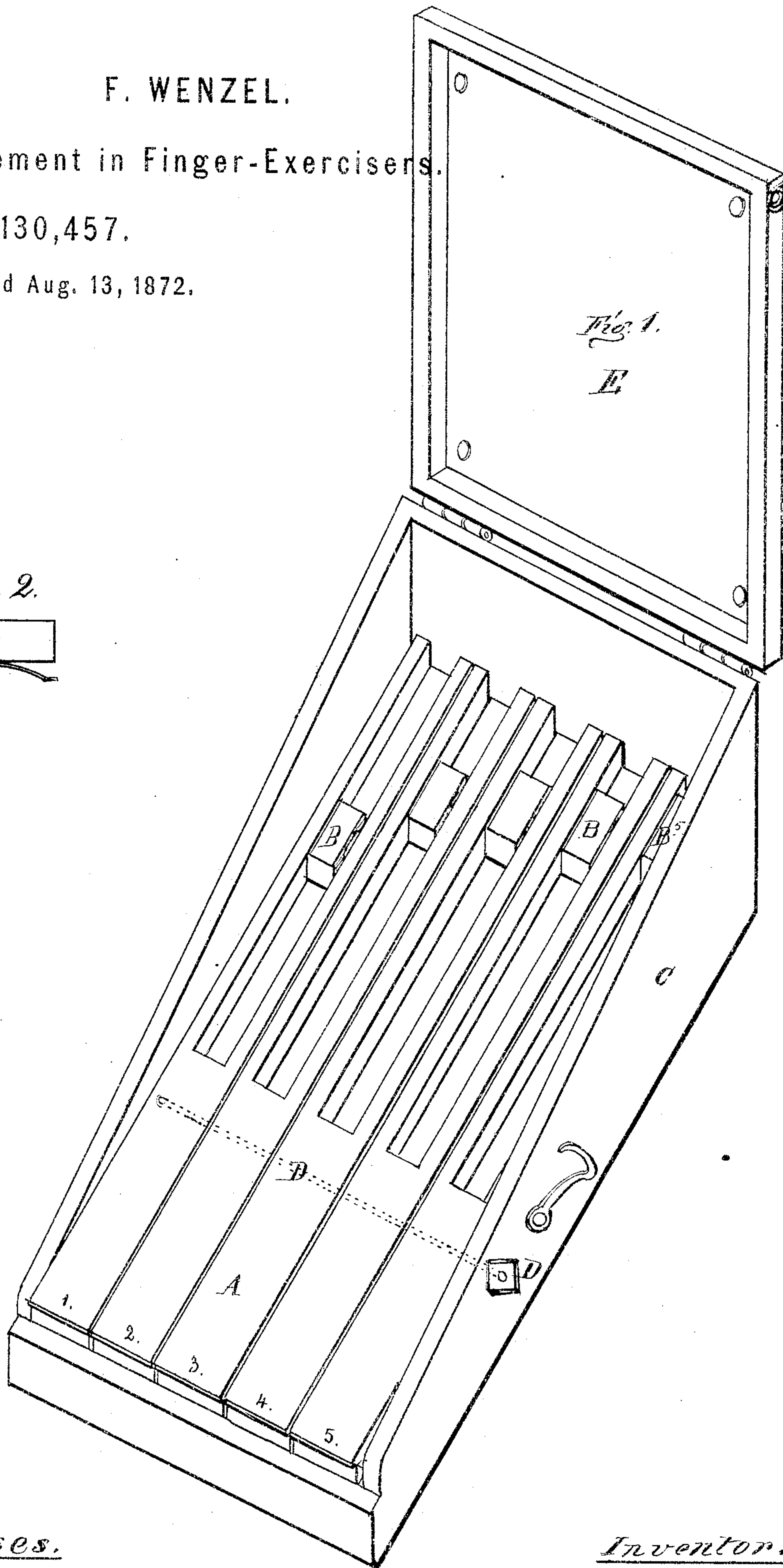
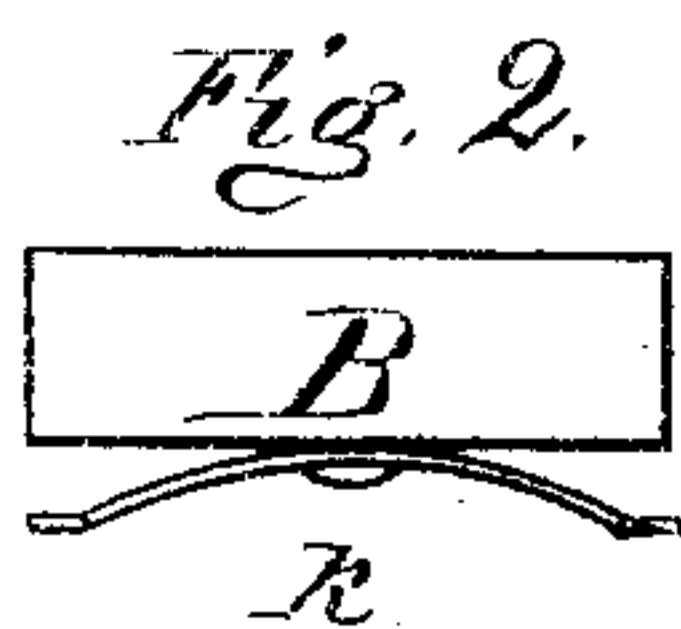


F. WENZEL.

Improvement in Finger-Exercisers.

No. 130,457.

Patented Aug. 13, 1872.



Witnesses.

C. C. Hartman
August Thime

Inventor.

Frank Wenzel

UNITED STATES PATENT OFFICE.

FRANK WENZEL, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN FINGER-EXERCISERS.

Specification forming part of Letters Patent No. 120,457, dated August 13, 1872.

SPECIFICATION.

I, FRANK WENZEL, of city and county of St. Louis and State of Missouri, have invented a new and improved device for the purpose of facilitating and perfecting the finger exercise of incipient players on the piano, organ, or melodeon, of which the following is a specification:

Starting from the well-known fact that the first, second, and third fingers are stronger and generally strike harder than the fourth and fifth fingers, the object of my invention is to equalize, by practice, the touch of all the fingers. My apparatus materially consists of a set of piano-keys, playing on a common axis, and secured in a case, which is lined with velvet or cloth to prevent any sound or noise.

A groove, L, is cut in each key, wherein a sliding weight, B, is placed, regulating the resistance of the keys in a reversed proportion to the strength of the fingers, so that, for instance, the fifth finger has to overcome the greatest resistance of the key, the weight B⁵ acting on the longest lever. The weights are kept in position by springs K, and small wash-

ers prevent the immediate contact and friction of the keys. The lid or cover E is also cloth-lined.

The advantage of my invention is apparent. As the weight of the keys is counteracting the strength of the fingers proportionally all the fingers will finally, by practicing, acquire an equal touch. Another advantage is the absence of the annoying sound produced on the piano, &c., when practicing the same studies.

Now, be it known that I do not claim the application of adjustable weights to the keys of musical instruments; but

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

An apparatus for finger exercise consisting of the grooved finger-keys A, in combination with the weights B and springs K, all inclosed in a cloth-lined case, materially as above described.

FRANK WENZEL.

Signed in presence of—

C. L. HARTMAN,
AUGUST THIEME.