

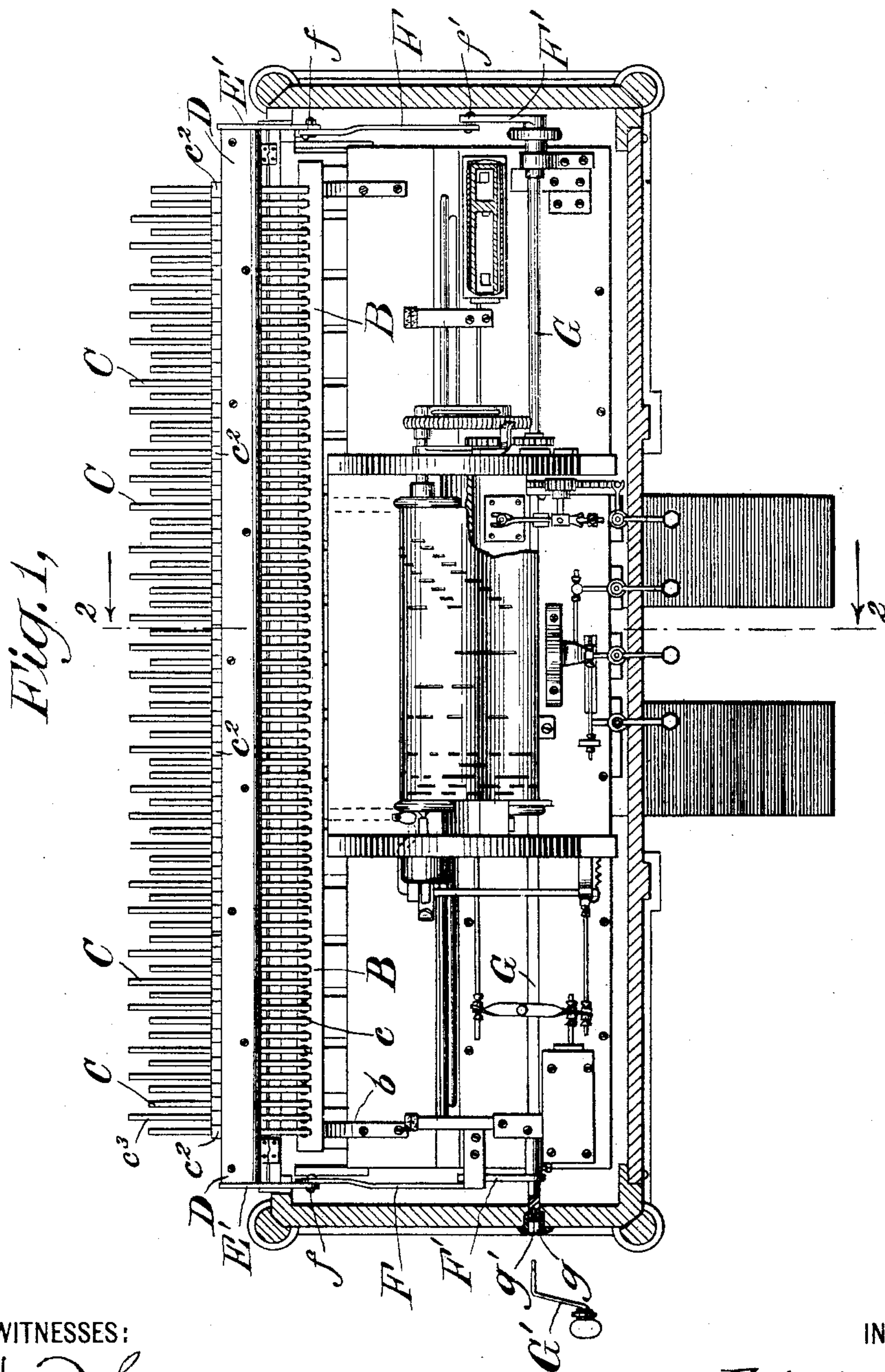
E. S. VOTEY.

KEYBOARD PLAYING ATTACHMENT FOR MUSICAL INSTRUMENTS.

(Application filed Jan. 29, 1902.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

Harry L. Liss
W. E. Cruise

INVENTOR

Edwin S. Votey

BY

Dickinson, Brown & Halgauer

HIS ATTORNEYS

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Fig. 2,

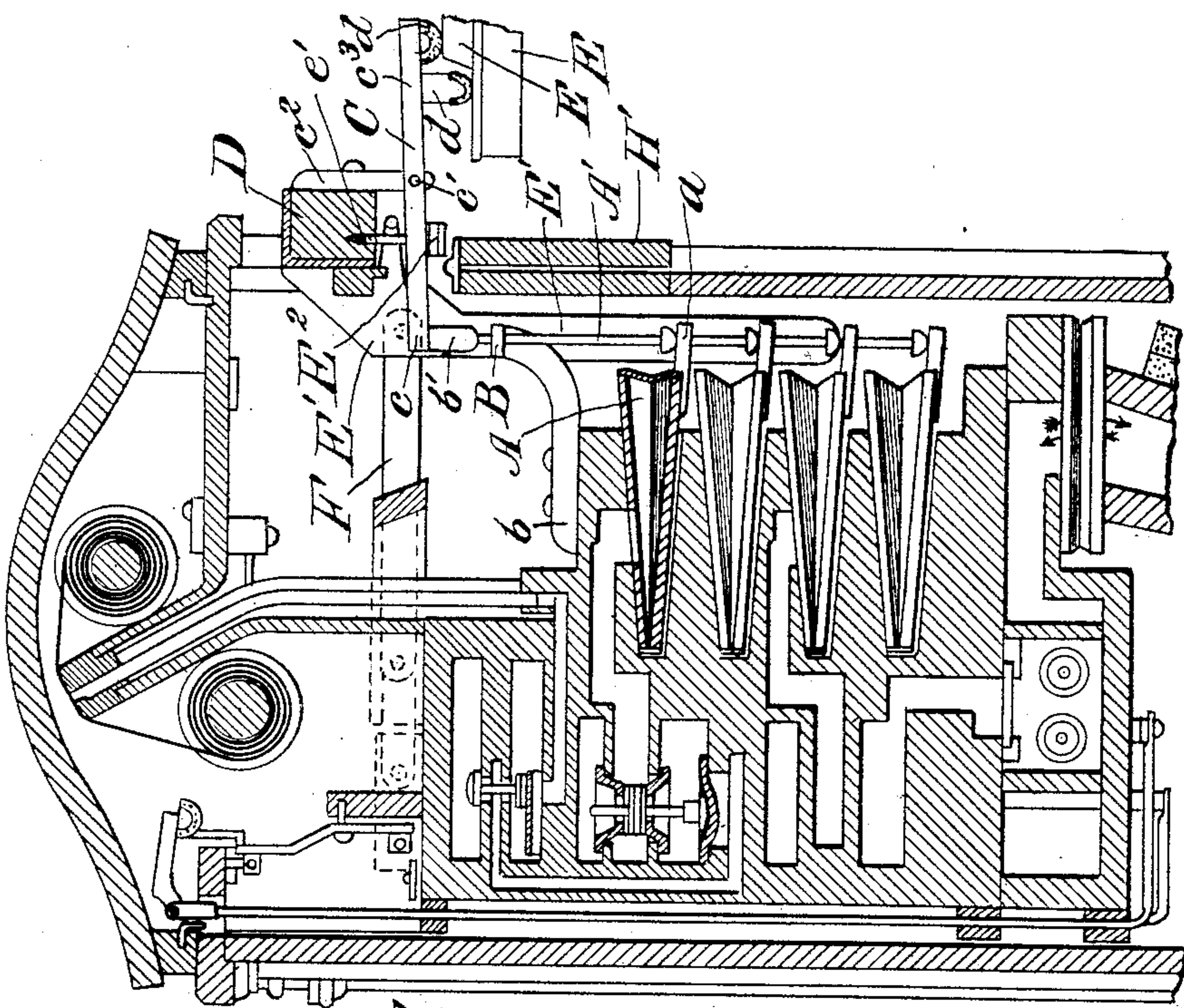
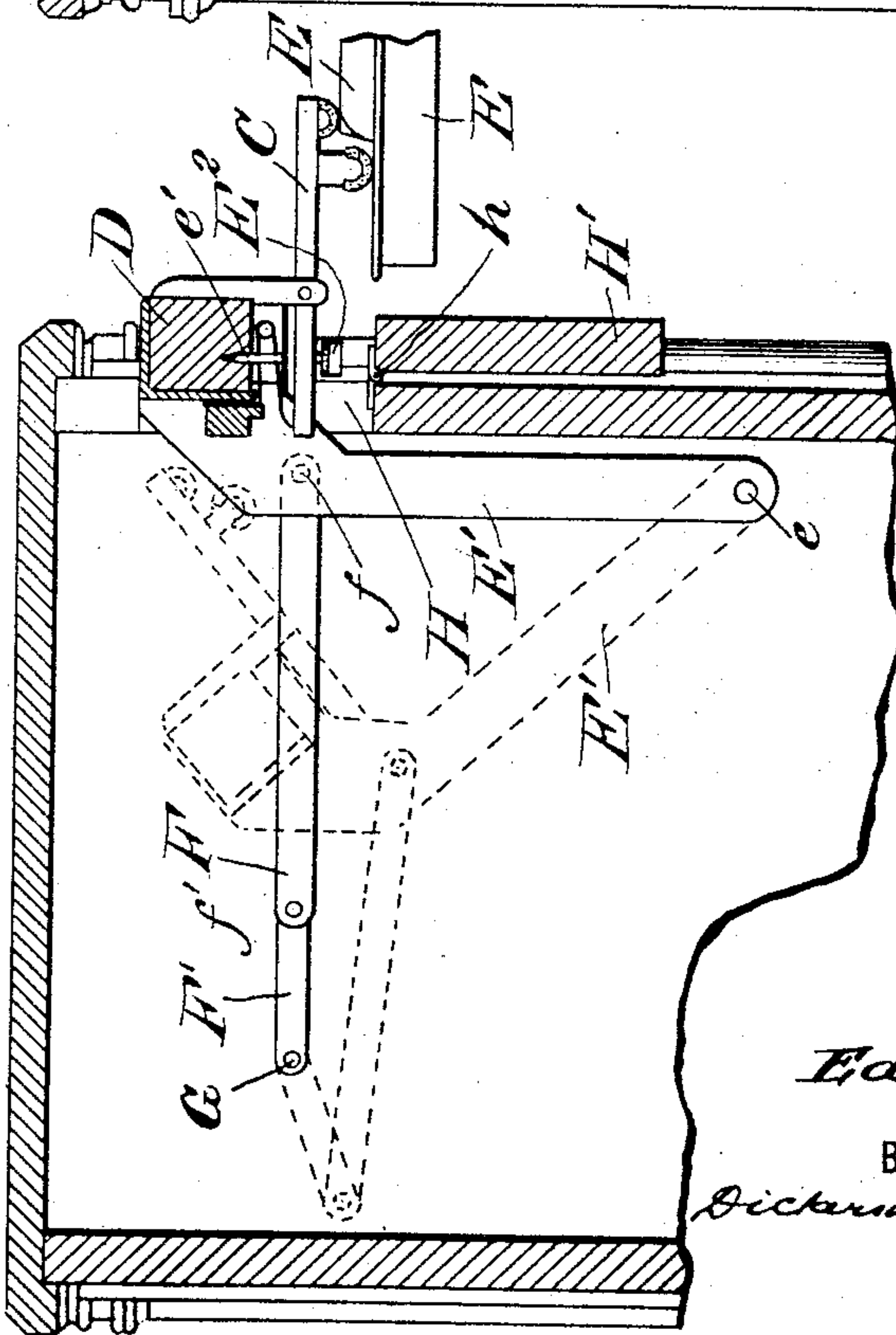


Fig. 3,



WITNESSES:

Harry S. Cox
E. S. Votey

INVENTOR

Edwin S. Votey

BY

Dickinson Brown Reagin

HIS ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWIN S. VOTEY, OF SUMMIT, NEW JERSEY, ASSIGNOR TO THE AEOLIAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF CONNECTICUT.

KEYBOARD PLAYING ATTACHMENT FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 696,216, dated March 25, 1902.

Original application filed November 16, 1899, Serial No. 737,223. Divided and this application filed January 29, 1902. Serial No. 91,712. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. VOTEY, a citizen of the United States, residing at Summit, in the county of Union and State of New Jersey, have invented a new and useful Retractable Striking-Lever for Keyboard Musical Instruments, of which the following is a specification.

My improvement relates to mechanical playing attachments for keyboard musical instruments.

The improvement consists in the combination, with the case, of a mechanical playing attachment for keyboard musical instruments, of operating mechanisms inclosed within said case and comprising a series of key-striking levers projecting outside of the said case when in playing position, and a common actuating means for retracting said levers into the case after playing.

My invention will be understood by reference to the accompanying drawings, in which—

Figure 1 is a plan view with the top of the casing removed. Fig. 2 is a central cross-sectional view on the plane of the line 2 2, Fig. 1; and Fig. 3 is a detail sectional view of the mechanism for moving one of the key-striking levers.

Similar letters of reference indicate similar parts in the several views.

From the pneumatic A extends an arm α , to which is attached or connected a vertical rod or wire A', which extends upward through a hole in a guide-bar B, secured by arms b to the action-case and having on its upper end a button b' , which lies close to the under side of the inner arm c of a finger or lever C, pivoted at c' in an upright flange c^2 , secured to a bar D, its other arm c^3 extending forward beyond the casing and having a pad d on its under side at its end to rest upon a piano-key E. These fingers are for operating or acting directly upon the keys of the piano and are arranged to correspond with the keys of the piano and to be of a number according to the compass desired—in the present instance sixty-five notes—and they are all pivoted in one line to the horizontal bar D, which bar has at each end a downwardly-

projecting arm E', pivoted at e to the end board of the casing. A horizontal bar E² extends under the inner arms c of the fingers, on which they rest, the bar being secured at intervals by screws e' , extending up freely between the fingers and screwing into the horizontal bar D, which prevents the inner arms of the fingers from dropping down too far, and each finger is yieldingly held to the bar by a bent spring secured by one end to the bar, its free arm bearing on the upper side of the inner arm of the finger.

To each arm E' of the finger-bar D is pivoted at f a link F, to which is pivoted at f' a shorter link F', secured one at each end to a wire or rod G, extending across the instrument and turning in the ends of the action-case. This rod G is enlarged at one of its ends, and such end projects nearly through a hole g in the casing end board and has a square socket g' , adapted to receive the square end of a key or crank-arm G', which being inserted therein and turned in the proper direction turns the rod and through the links F and F' swings up and backward the links F, pushing back the bar D of finger-frame for the fingers to project outward through an opening H in the back of the casing into position to be placed over the piano-keys when desirous of playing the piano. Turning the crank in the opposite direction swings the bar, with the fingers, back into the casing out of the way when not in use, when the board H', hinged at h to the back board of the casing, can be swung up and secured in any suitable manner, closing the opening. The finger frame or bar being connected by links to the rod at each end, it is moved out and in firmly and squarely.

Having thus described my invention, what I claim is—

1. In a mechanical playing attachment for keyboard musical instruments, the combination with a case inclosing the operating mechanism, of a series of key-striking levers projecting without said casing in their playing position, and a common actuating means for retracting said levers within the case.

2. In a mechanical playing attachment for keyboard musical instruments, the combina-

tion with a case inclosing the operating mechanism, of a series of key-striking levers and a removable member forming a common fulcrum for said levers adapted to carry the same from a position within to a position where they project without the case.

3. In a pianola or keyboard playing attachment, in combination, a frame or bar movable forward and backward on a suitable support, a series of key-striking levers pivoted to said frame or bar and projecting laterally therefrom, the frame being capable of moving forward for its said levers to project beyond a certain point or line and of moving backward for its said levers to be within a certain point or line.

4. In a pianola or keyboard playing attachment, in combination, a frame or bar pivoted to a support in a suitable case, a series of key-striking levers pivoted to said frame or bar and projecting laterally from said frame, the frame being capable of moving forward to project the said levers outward from the case and of moving backward for it and the said levers to be within the case.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDWIN S. VOTEY.

Witnesses:

F. R. WYCKOFF,
W. C. MANSFIELD.