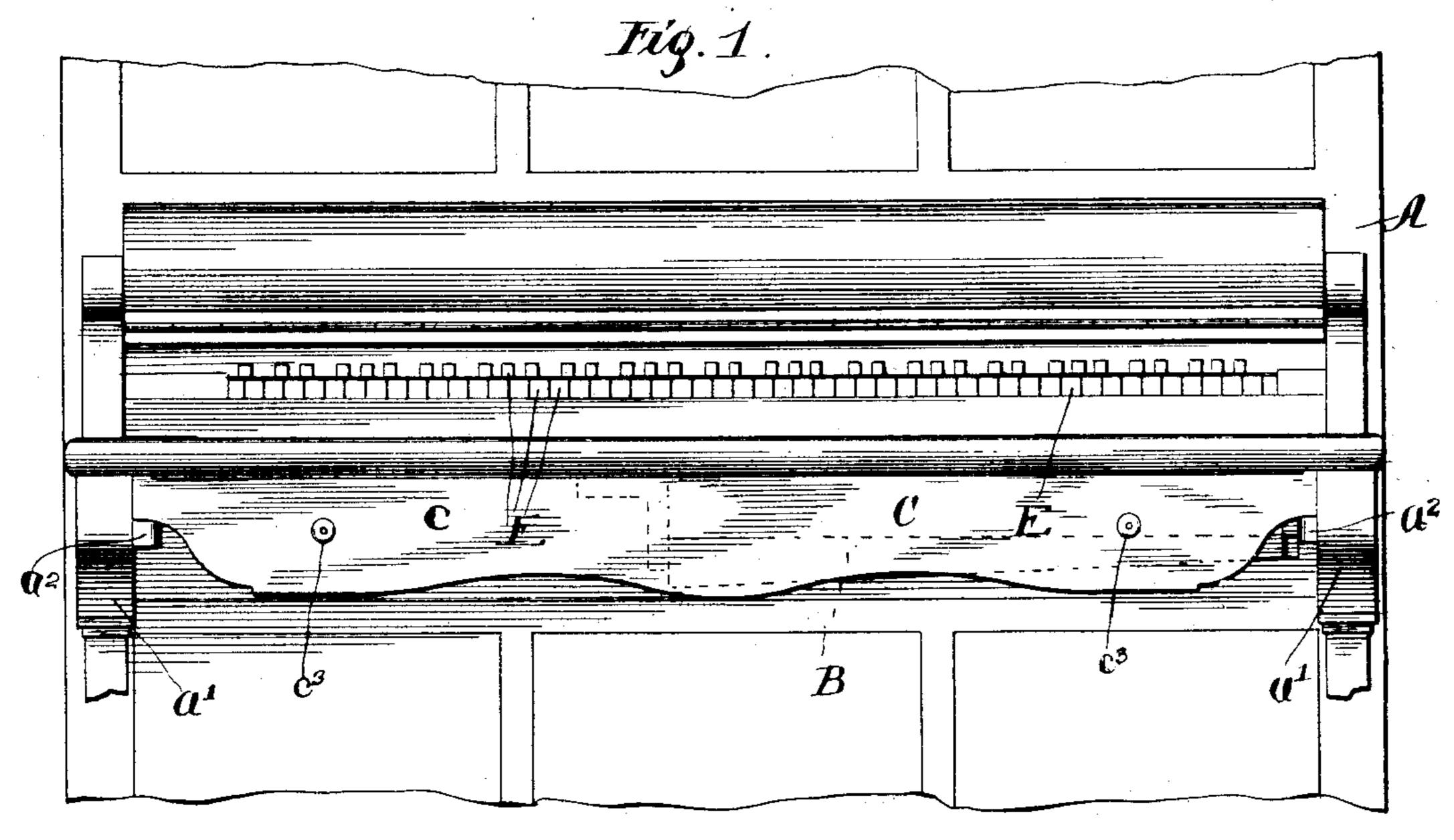
F. KINDERMANN.

ATTACHMENT FOR PIANOS.

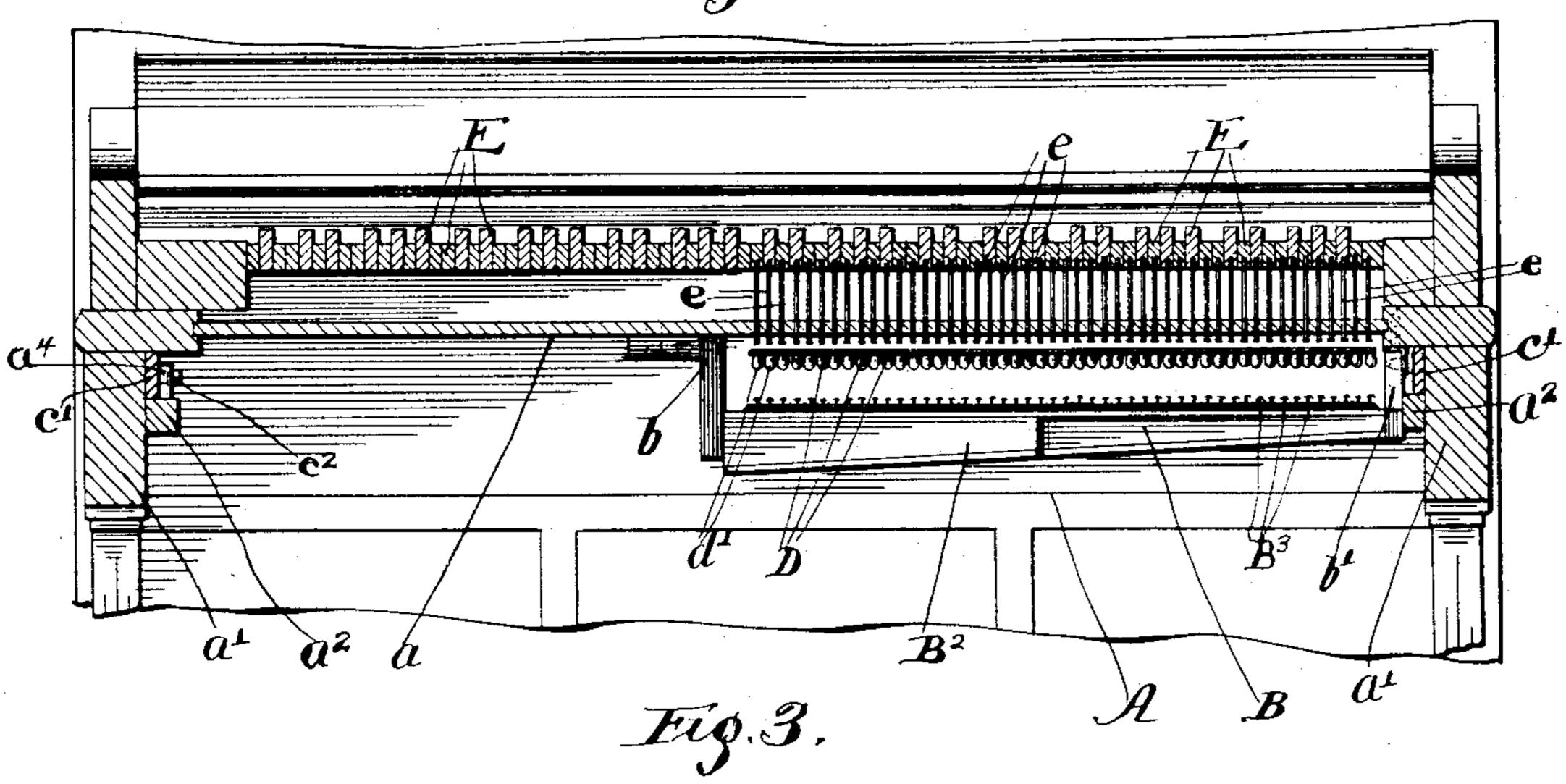
(Application filed Jan. 17, 1898.)

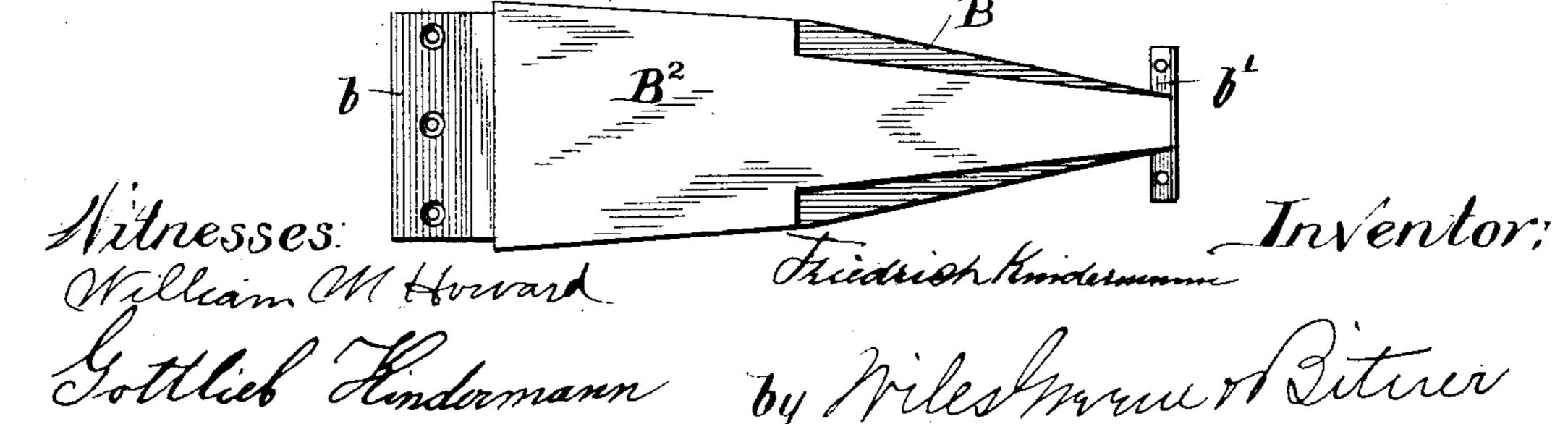
(No Model.)

2 Sheets—Sheet I.







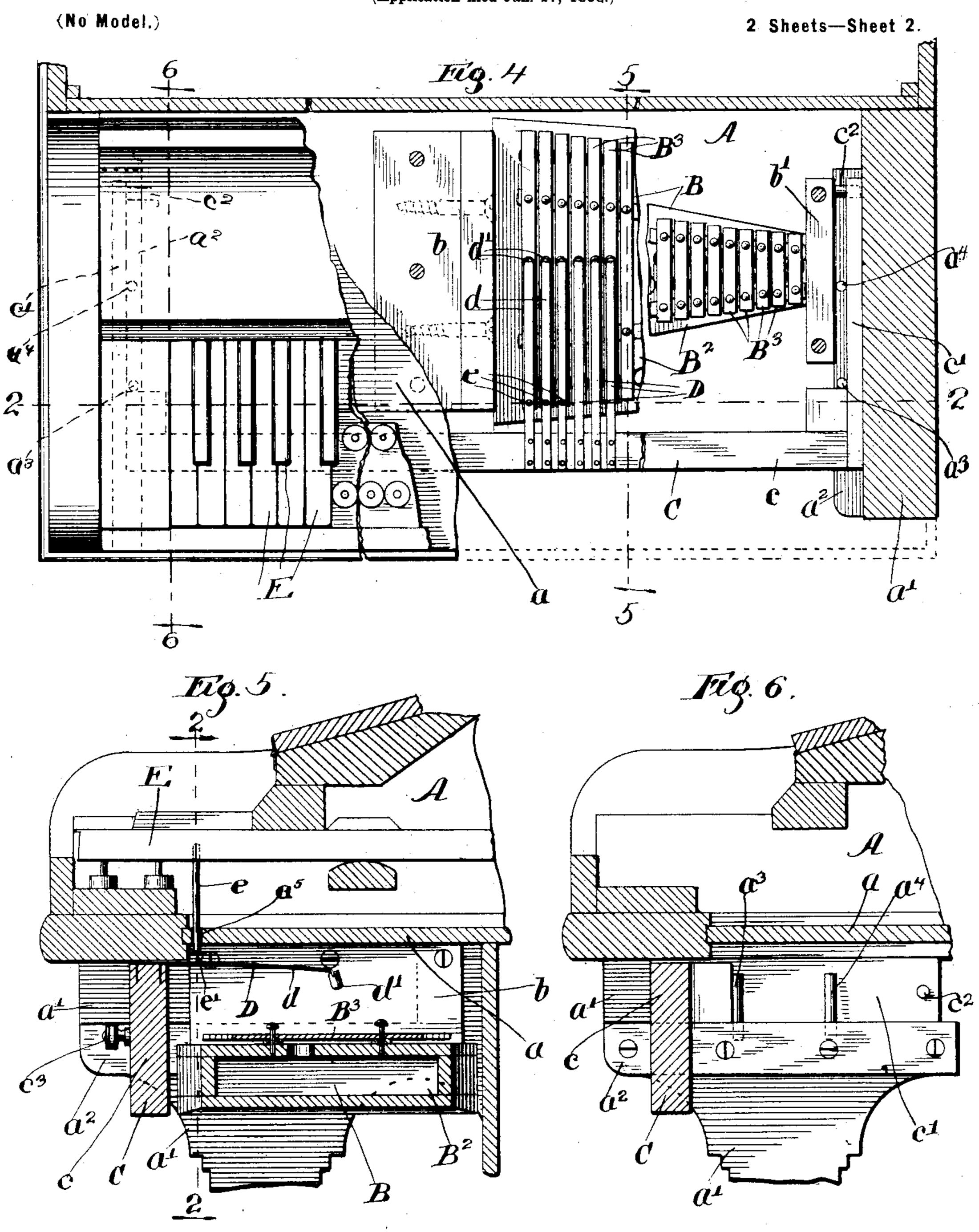


Attys.

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ATTACHMENT FOR PIANOS.

(Application filed Jan. 17, 1898.)



Witnesses: Friedrich Kindermann Inventor: Sottlieb Hindunann by Wills Mirrer of Bitur

United States Patent Office.

FRIEDRICH KINDERMANN, OF OREGON, ILLINOIS.

ATTACHMENT FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 609,966, dated August 30, 1898.

Application filed January 17, 1898. Serial No. 666,967. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH KINDER-MANN, a citizen of the United States of America, residing at Oregon, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Attachments for Pianos and the Like, of which the following is a specification.

My invention relates to certain new and useful improvements in piano attachments, the object being to combine with an ordinary piano a supplementary musical instrument—as, for instance, a xylophone of the class known as "orchestra-bells"—so that said instrument may be played in accompaniment with the strings of the piano by the manipulation of the keys in the ordinary manner.

The invention consists, therefore, in certain novel features, a description of which will be found in the following specification, and the essential features more definitely pointed out in the claims appended hereto.

The invention is clearly illustrated in the drawings furnished herewith, in which—

Figure 1 is a front elevation of a portion of a piano with my attachment applied thereto. Fig. 2 is a view partly in front elevation and partly in vertical longitudinal section, the line of section being shown at 2 2 in Figs. 4 30 and 5. Fig. 3 is an under plan of the xylophone itself. Fig. 4 is a plan view of the forward portion of the piano containing the keys, certain parts of the framework of the piano being broken away to reveal my invention, 35 which would otherwise be hidden from view. Fig. 5 is a vertical transverse section in the line 5 5 of Fig. 4, and Fig. 6 is a similar view in line 6 6 of Fig. 4.

Figs. 1 and 2 show the entire series of keys in a piano A, together with certain portions of the framework necessary to illustrate my invention. To the under side of the keyboard a (see Fig. 2) is secured a xylophone B by means of brackets b b', the xylophone being made up of a hollow body B^2 and sonorous strips B^3 , supported thereon in the ordinary manner.

On the inner sides of the legs a' of the piano are secured cleats a^2 , (see Figs. 2, 4, 50 and 6,) upon which slides a framework C, composed of a horizontal front board c and side strips c', resting on the cleats. Two pins

 a^3 a^4 are secured upon the cleats a^2 and are adapted to limit the movement of the frame C. In the inner ends of the side strips c' are 55 secured pins c^2 , arranged to strike the pins a^4 when the frame C is drawn outward to disconnect the attachment. Knobs c^3 are provided upon the front of the facing-board c to serve as handles in drawing the frame- 60 work outward.

The xylophone here shown occupies the right-hand space underneath the keyboard, and the sonorous strips B³ are toned to correspond with the strings from "middle C" and 65 upward; but it is obvious that, if desired, the xylophone may be extended entirely across the piano to embrace all of the keys. Hammers for striking the strips B³ are shown at D, (see Figs. 4 and 5,) and consist, preferably, of flexi-70 ble strips secured upon the upper face of the top of the front board c, provided at their rear ends with heads d'. These hammers are arranged immediately above the strips B³ and also directly beneath the keys E of the 75 piano, and in the under side of the keys are secured pins e, extending down to the hammers and preferably provided upon their lower ends with felt or other pliable material e' to cushion the blow upon the hammers. 8c Holes a^5 are provided in the keyboard a, (see Fig. 5,) through which the pins extend, these holes serving to guide the pins.

In the drawings the frame C is shown as in its innermost or operative position. By 85 drawing the frame outward until the pins c^2 upon the side strips strike the pins a^4 the hammers may be removed from operative position and the xylophone disconnected, so that the strings of the piano alone will be affected 90 by the manipulation of the keys.

When the xylophone is connected, as shown in the drawings, and the keys played upon, the flexible strips d will be struck by the pins e, causing the hammers to give sharp blows 95 upon the metal strips and producing a very pleasing accompaniment to the piano.

In the above description a xylophone has been described as the auxiliary instrument used in combination with the piano; but I do not desire to limit myself to the use of a xylophone, as sonorous metallic strips are equally as well adapted for the purpose as wooden ones, and in the claims where the term "xylo-

phone" is used I desire to embrace a supplementary instrument provided with metallic

strips as well as wooden ones.

The construction shown and described has been devised with particular reference to its application to the ordinary piano. More or less modification may be found desirable in the construction of pianos especially adapted to this improvement, and, furthermore, great variation in form and construction is possible, so that I desire not to limit myself to the specific devices here shown; but

I claim as new and desire to secure by Let-

ters Patent—

15 1. The combination with a piano, of a musical instrument secured beneath the keys of the piano, a frame provided with a series of hammers adapted to play said musical instrument when in the proper position with relation thereto, connecting devices between said hammers and the keys of the piano and means for supporting the frame adapted to permit of its movement into or out of said proper position; substantially as described.

2. The combination with a xylophone adapted to be secured to the under side of the keyboard of a piano, of an adjustable frame, C, a series of hammers, D, secured to said frame and adapted to strike the xylophone and pins,

30 e, secured to the keys and adapted to strike said hammers when the frame is in one position, but not to strike them when the frame is adjusted to another position; substantially as described.

35 3. The combination with a piano, of a xylophone supported beneath the keyboard, a movable series of hammers adapted to play the same and devices operated by the keys for actuating the hammers, the movement of the hammers being adapted to throw them into or out of proper position for striking the

xylophone; substantially as described.

4. The combination with a piano, of a xylophone supported beneath the keyboard, a se-

ries of hammers adapted to play the same 45 provided with a movable supporting device whereby they may be moved into or out of position to strike the xylophone, and a series of pins extending down from the keys of the piano and adapted to be depressed by said 50 keys and to strike the hammers; substantially as described.

5. The combination with a piano or analogous musical instrument, of a supplementary musical instrument having a series of musical 55 elements corresponding with the strings of the piano, a series of hammers adapted to play said supplementary instrument, a frame movably supported upon the under side of the keyboard and adapted to support said 60 hammers and suitable means connected with the keys for striking the hammers of the supplementary instrument, the hammer-carrying frame being adapted to be moved into two positions whereby when in one position said 65 hammers will be struck by the keys and in another position will not; substantially as described.

6. The combination with a piano having a pair of cleats, a^2 , secured thereto, of a xylo-70 phone supported upon the under side of the keyboard, a series of hammers adapted to play the same, a series of pins secured to the keys of the piano and adapted to strike said hammers, a hammer-supporting frame having the 75 side rails, c', adapted to slide upon the cleats, a^2 , stops upon said frame and coacting stops upon the cleats lying in the paths of the first-named stops adapted to limit the movement of the frame; substantially as described.

In witness whereof I have hereunto set my hand, at Oregon, in the county of Ogle and State of Illinois, this 12th day of January, A. D. 1898.

FRIEDRICH KINDERMANN.

Witnesses:

WILLIAM M. HOWARD, GOTTLIEB KINDERMANN.