This invention relates to new and useful improvements in a baby grand piano.

The invention has for an object the construction of a baby grand piano with curved wall casing materially smaller than the present casings and still maintain the size of the string plate and sounding board of the various known designs of grand pianos of materially larger case dimensions and by the particular arrangement of the string scale to attain the string lengths of much larger pianos with reference to the curved wall dimensions. Also by this special construction to augment the vibration of the sounding board by the vibrations of the curved wall or case rim itself, along violin construction principles.

This invention contemplates forming the curved wall casing of the piano, of upper and lower sections, and to arrange certain recesses in the sections and to associate the edges of the string plate and sounding board with the recesses so that the over-all size of the casing is much smaller than heretofore.

For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of the disclosure:—

Fig. 1 is a plan view of the curved wall casing and several interior parts of a baby grand piano with the cover removed and constructed according to this invention.

Fig. 2 is an edge elevational view of Fig. 1 looking in the direction of the line 2—2 of Fig. 1.

Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a vertical sectional view taken on the line 4—4 of Fig. 1.

Fig. 5 is an enlarged sectional view taken on the line 5—5 of Fig. 1.

Fig. 6 is a fragmentary enlarged sectional view taken on the line 6—6 of Fig. 1.

Fig. 7 is a perspective view of Fig. 1, a portion thereof being broken away to disclose interior parts.

Fig. 8 is a perspective view of the upper section of the casing.

Fig. 9 is a fragmentary sectional view taken on the line 9—9 of Fig. 7.

Fig. 10 is a fragmentary sectional view taken on the line 10—10 of Fig. 9.

Fig. 11 is a sectional view taken on the line 11—11 of Fig. 1.

Fig. 12 is a perspective view of Fig. 11 looking from the left hand end.

The baby grand piano, according to this invention, comprises a curved wall casing consisting of an upper section 10c resting on a lower section 10b. A string plate 11 and a sounding board 12 are mounted within the casing. The lower inner edge portion of the upper section 10c is recessed, forming a space 13 for the edges of the string plate and sounding board. It is because of this recess, and the edges of the string plate and sounding board engaging therein, that it is possible to construct the outer corner of the piano of a smaller size than was possible heretofore. The outer top edge of the bottom section 10b is formed with a recessed portion 14, producing the effect of molded groove between the upper and lower sections.

The upper section 10c of the wall casing is reinforced at the front with a transverse bar 15 extended from side to side. A front vertical strip 17 is located beneath the bar 16. These parts serve to close the front of the upper section of the casing. The front of the lower section of the casing is closed with a cover member or fall board 18 which is supported at its ends by hinges 19 upon small blocks 20 attached upon the side portions 21 of the casing. The arrangement is such that the cover 18 is adapted to be engaged over and cover the key board 22 (not shown in detail) of the piano. The cover 18 may be opened by pivoting the front end upwardly with specific relation to the disclosure shown in Figs. 11 and 12.

As shown in Figs. 11 and 12, the fall board 18 is pivoted at 18a a certain distance away from the edge 18h so as to shorten the distance of the piano between the front A to the rear B (as clearly indicated in Fig. 4).

The string plate 11 is reinforced with a plurality of ribs 11a, 11b, etc. At the front edge the string plate has a lip portion 11c which rests upon the sounding board 12. At the sides the string plate 11 is in contact with the sounding board (see Figs. 5 and 6). At the center, the ribs 11a, 11b, etc. are slightly spaced from the sounding board (note the space 25 in Fig. 4) so as not to interfere with the proper vibration thereof.

The bottom section 10b of the casing is reinforced with several transverse blocks 26, 27, etc. (see Fig. 4). The string plate 11 and the sounding board 12 are attached upon the top of the
lower section 10° within the space 13 by screws 28 (see Fig. 5). The upper section 10° of the casing is attached to the lower section by a plurality of wood screws 28 which engage into recesses 30 in the top edge of the upper section 10° and pass into the space 13 and passing freely through the string plate and the sounding board 12 and threadedly engage the lower section 10° (see Fig. 6).

10. Resilient headed buttons 31 (of rubber) close the openings 30 and serve as abutments for the usual hinged cover 32 of the piano. The buttons 31 serve to hold the cover slightly open off the top of the upper section 10° so that the sound waves may easily emanate therefrom.

The cover 32 is provided with the usual cover leaf 32° hinged at 32°. The free edge of the cover leaf 32° is provided with an apron strip 15 which is aligned with but spaced from the transverse bar 16 when the leaf is in the covering position. When the leaf is folded back, a rubber button 31 in cover 32 keeps the leaf 32° spaced from the cover.

The piano is also provided with a built-in music sheet holder. This music sheet holder comprises several parallel bars 33 attached upon the strip 16 and a transverse rib 14 of the string plate. Screws 34 are used to attach the rib 14 at its front and rear ends. A music sheet support base plate 35 is slidably mounted upon the bars 33. This base plate is formed with several grooves 35° into which the lower edges of the music sheets may be engaged. An upward extending neck element 36 is attached to the rear edge of the base element 35. It is possible to adjust the music sheet holder forwards or rearwards, limited only by the lengths of the bars 33.

It is to be understood that the piano body may be of any suitable material and finish.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board.

2. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, the outer edge of the lower section being recessed forming a molded groove effect.

3. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, and screws engaging through the string plate and sounding board.

4. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, and screws engaging through the string plate and sounding board and attaching these parts to the top portion of the lower section of said casing, and other screws engaged through the upper portion of the casing and passing through the string plate and the sounding board and attaching these parts to the top portion of the lower section of said casing, and other screws engaged through the upper portion of the casing and passing through the string plate and the sounding board and then screwed into the lower section, said latter-mentioned screws engaging into recesses formed in the top edge of the upper section, and resilient headed buttons closing said openings and forming a rest for the cover of the piano.

5. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, and screws engaging through the string plate and sounding board and attaching these parts to the top portion of the lower section of said casing, and other screws engaged through the upper portion of the casing and passing through the string plate and the sounding board and then screwed into the lower section, said latter-mentioned screws engaging into recesses formed in the top edge of the upper section, and resilient headed buttons closing said openings and forming a rest for the cover of the piano.
board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, parallel spaced bars mounted within said upper section, a sheet holding base element slidably supported on said bars, and a back element extending upwards from the base element.

9. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, parallel spaced bars mounted within said upper section, a sheet holding base element slidably supported on said bars, and a back element extending upwards from the base element, said bars being supported in front on a strip extended across the front of the upper section, and in the rear on a transverse rib on said string plate.

10. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, and screws engaging through the string plate and sounding board and attaching these parts to the top portion of the lower section of said casing, a spaced cover hinged to the upper section, a hinged cover leaf on said cover and an apron strip secured at the free end of the hinged cover leaf to cover the upper section of the piano.

11. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, and screws engaging through the string plate and sounding board and attaching these parts to the top portion of the lower section of said casing, a fall board to cover the key board of the piano, means for hingedly securing the floor board to the said lower section, the hinges of the floor board being spaced forward from the rear edge of the fall board when the latter is closed.

12. In a baby grand piano, a curved wall casing consisting of an upper section resting on a lower section, a string plate and a sounding board within said casing, and the lower inner edge portion of the upper section being recessed forming a space for the edge of the string plate and sounding board, and screws engaging through the string plate and sounding board and attaching these parts to the top portion of the lower section of said casing, a fall board to cover the key board of the piano, means for hingedly securing the floor board to the said lower section, the hinges of the floor board being spaced forward from the rear edge of the fall board when the latter is closed, a transverse bar connecting the front of the upper section, a vertical strip depending downward from said transverse bar, said means comprising a pair of hinged blocks attached to the sides of the lower member and the hinges of the fall board being connected to the rear end of the said blocks so that the top of the fall board is in alignment with the said vertical strip of the upper section of the piano when the fall board is closed.

CHARLES LOITSCH.