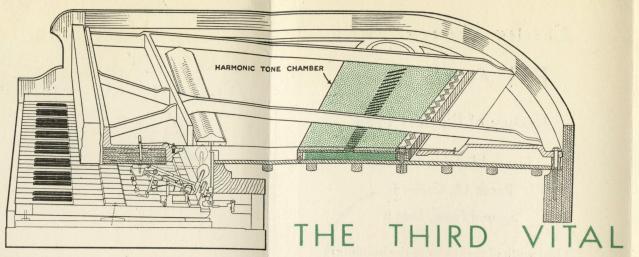


The master of his craft now brings you the fruits of his two-score years of inspired labor and says » It is my best; truly, there is no other that compares



All-wise Solomon said "there's nothing new under the sun," yet lightning remained in the skies until captured by Franklin's kite and tamed by Edison's genius. Apples dropped unheeded from countless boughs ere one hit Newton with the force of 'gravity'. Kettles boiled merrily for centuries until Watt 'discovered' steam power. Birds alone mastered the ether until the Wright Brothers. And piano builders have always relied upon string arrangement over elementary sound-boards until Stein practically applied the long known "sound-box" theory of acoustic law.

THE HARMONIC TONE CHAMBER, finally perfected in 1932 by Charles Frederick Stein after twenty-two years of experimentation, enriches the timbre and 'carry' of piano tone in the same full measure as piano action was improved by Johann Andreas Stein's direct hammer-to-key design in the mid-eighteenth century; or as cumbersome sizes were eliminated by the designing of the first over-strung bass almost a century later.

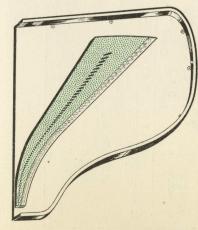
In front of and snugly hugging the full length of the curving treble bridge is this tapered, sectionalized chamber. With its front wall conforming to the crown and its top securely joined to the treble bridge, it becomes an integral part of the sounding board. Internally, this hollow chamber is sub-divided into eight graduated sections, each of a fifth-harmonic. Through its top at exact intervals are sixty-two oval openings. With the scientific correctness that only a master scale draftsman can determine, one of these openings forms an air-column exactly beneath the strongest tone-point of each string. When the tone wave crosses this spot, The Harmonic Tone Chamber begins its amazing function.

AS NECESSARY AS THE BASE BOARD OF A VIOLIN



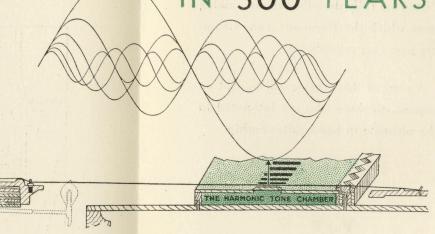
Remove the back panel from any violin, and what becomes of its pure and vibrant tone? That is why violins and all other stringed instruments require a sounding box or chamber instead of merely a single sounding board.

Mr. Stein's modern application to pianos of this ancient acoustical principle is the full secret of THE HARMONIC TONE CHAMBER.



IN 300 YEARS

IMPROVEMENT



COMPARE

Science today knows much more about tone. Instruments exist which measure and photograph the length, shape, and intensity of any audible sound. Study the above graph of the rotating tone wave of a single note. See where it begins immediately with the hammer's contact upon the string. Then watch its graceful curving swell until its crescendo is attained. Then mark how quickly it diminishes into nothingness. Now, at its apogee from the string—at its very strongest and most brilliant point—this tone curve passes exactly over the aperture of The Harmonic Tone Chamber.

Up to this point, the performance of all piano notes is identical, varying only in the quality and richness afforded by the instrument. But from this point onward begins the difference! Where dissonance, "fuzziness," "woody" or "dead" spots occur in some part of every note, The Harmonic Tone Chamber filters and purifies the full length of the complete note. Where notes from all other pianos fade rapidly, The Harmonic Tone Chamber in the charles frederick Stein carries on! It holds, by amplification, the full volume of any given note within the treble range twice as long as an ordinary piano!

The Harmonic Tone Chamber

described in this folder is an exclusive feature of the CHARLES FREDERICK STEIN PIANOS. It is the only fundamental improvement made in piano construction in many years.

This and other exclusive, vital points of construction making America's Finest Piano, are fully described in our catalog from which the Harmonic Tone Chamber pages are reproduced.

A copy of this catalog will be sent on request, to those who are interested in the ultimate in handcraftsmanship.



Charles Frederick Stein
3047 Carroll Avenue
Chicago, Illinois, U.S.A.

Charles Frederick Stein

PIANOS

Century of Progress 1934

General Exhibits Building
Booth 15, Group R
Second Floor, Unit 3

(Just south of the center of the building)
18th street Entrance

