through the medium of hard work, achieved a result which served both Art and Science.

Pages could be written on these "requests" or "demands" which musicians make of their favorite instrument-makers. The researches and studies of Theodor alone would fill many volumes, for he was prolific in his discoveries, and has a record of at least thirty-four patents. One—the duplex scale—was of major proportions in the purification of ultimate tonal quality. Theodor's meticulous analysis of the vibration and sympathetic vibration problem of a string stretched over a bridge led him to this discovery of the inestimable value of bringing the unused portions of the vibrating strings into sympathetic reactions.

Represented in his scientific records are the studies of acoustics, of the elasticity of woods, the behavior of strings when vibrating, sound velocities of various materials, and the whole field of mathematics. Theodor's accomplishments alone add up to scientific genius. They required the patient studiousness of a researcher, the exciting imagination of an inventor, and the unfailing devotion of an idealist. For twenty-five years, he experimented and labored over the piano's insides, and steadily, under his guiding hand, the art of music and the science of music-making became ever more permanently wedded.

Consider the "voice" of the piano. Examine the action, both the exposed and the hidden parts, and you will find it is made up of no less than seven thousand components. To