Caruso Cursed By His Musical Bones

Scientists Point Out to the World's Greatest Tenor His Danger of Being Shattered by the Dominant Note of His Uniquely Vibrant Skeleton

CARUSO, the world's greatest tenor, is scientifically eligible at any moment to the same fate that befell the walls of Jericho—if science is to be believed at all and the well-known law of vibrations is not founded upon fallacies.

This extraordinary announcement follows logically the discovery by Dr. George Lloyd, the distinguished London physician, that the $3,000-a-night singer has musical bones.

The uniquely vibrant quality of Caruso's skeleton makes of him a human music-box, and sets him aside from his fellow men and lays him open to as unique a danger. Just as a glass may be broken by a violin playing sustainedly the same note which that glass gives upon being tapped with the finger, so, too, the scientists have told Caruso, he may be shattered by a sound of just the pitch, quality and number of vibrations a second that will meet the dominant note of his resonant bones.

In other words, somewhere in the infinite world of sounds lurks one sound which conceivably can so set every tiny molecule of Caruso's skeleton vibrating so rapidly that the bones themselves will disintegrate and the tenor either drop into a squid-like mass, or else be torn apart by what would literally be the atomic explosion of his framework.

This sound may hide anywhere—in a steamer's foghorn, in a locomotive whistle, in the roar of an avalanche, or even in the battered penny trumpet of a street urchin!

To the incredulous it may be said at once that this statement is not a joke in any way. It is a sober, scientific truth.

It is a little difficult to make clear the scientific basis upon which this peril of Caruso stands. And yet it is simple. Everything in nature vibrates. Matter itself is, it is thought, only a peculiar vibration of the ether. And what is called vibration is only the movement of all the tiny particles of matter of which we and everything that exists is formed. Naturally, all the particles or atoms in every division of matter, from stone to flesh, are governed by law. If there were no such law, everything would fly to bits—just as the flywheel of a dynamo bursts into pieces when the speed at which it revolves becomes so great that it overcomes the cohesive force that holds all its particles of steel together.

This law of vibration fixes the rate of movement of the atoms of each substance so that they do not exceed the speed limit and cause disintegration of the thing they form. It produces what is called equilibrium of forces. And here enters a curious thing—every vibration produces what we call a musical sound. Every musical sound is simply composed of vibrations. The highest notes we can apprehend contain the greatest number of vibrations to the second; the lowest notes contain the fewest. Above the highest notes and below the lowest are vibrations our ears are not built to hear, but which we know exist, by their effects.

The note which each substance gives forth through its atomic vibration is called its dominant note. And just as the spinning fly wheel can be made to burst by increasing its speed beyond the strength of its articles to hold themselves together, so the atomic vibration of everything can be so increased that at least every particle exceeds the speed limit, breaks the law, rushes into space, and so that thing disintegrates and vanishes.

One of the ways of doing this is to find the dominant note of the thing to be destroyed, and then, by producing a long-sustained, sympathetic note, so stimulate the vibration that at last it flies apart.

Here are some practical illustrations of the law. The Bible tells us how the walls of Jericho were made to fall by the blowing of trumpets. Science says that this is perfectly possible. The walls of Jericho had their dominant note—that is, their rate of vibration. Joshua, who was apparently quite a scientist, discovered what this was. Having discovered it, he selected hundreds of trumpets producing this note. The Israelites blew them lustily. The vibrations of the trumpets set up a sympathetic vibration of the walls. The horns kept blowing. The walls vibrated more and more. And finally they vibrated so fast that all their particles flew apart and the walls quite naturally fell.

Miss Mary Garden with Whom Caruso Will Not Sing Because Two of Her Notes Make His Bones Ache.

Again, it is a military rule that whenever soldiers cross a bridge they break ranks. That is, they do not keep step. If they did keep step going across, the unison would break down the bridge. It has been estimated that five thousand soldiers keeping step on Brooklyn Bridge would break it down in thirty minutes. Yet a hundred thousand, not keeping step, could march across it all day without weakening a strand. This is cause the rhythmic beat of the marching feet in step so increase the vibrations of the bridge itself that it passes outside the law. In the broken ranks there is no rhythm.

In this same way, the continued reproduction of the dominant note of anything so increase its vibration that it flies apart.

Thomas Edison has said that this same Brooklyn Bridge could be destroyed in the same way by a man playing long enough the dominant note in which it vibrates. In this case, vibrations from the musical instrument correspond to the tread of the feet of the soldiers marching in step. Every great structure in New York and anywhere else in the world is subject to the same influence.

Again, when certain big ocean steamers come into New York harbor and blow their deep whistles, certain skyscrapers so vibrate in harmony that ink wells are shaken from tables and chairs rattle across the floors. The Lusitania, for instance, will make the Singer Building shake to its foundations, while the Olympic will not affect the Singer at all, but cause the Woolworth tower to shiver all through. This is because the dominant note of the Lusitania is the dominant note of the Singer and the dominant note of the Olympic the dominant note of the Woolworth. Many of the occupants of each building complain that at such times they experience a deep inward tremor as though, as one says, "My bones were dancing about."

Here we foreshadow the plight of Caruso.

And still again, Colonel Younghusband, the brave English officer who led the British expedition into Lhassa, the mysterious capital of Thibet, relates a curious punishment meted out to offenders by the Lamas.

"They place these culprits in a dark room," he says, "and there they leave them. There is a contrivance in the room that emits a continuous note of a peculiar timbre—F sharp I placed it as. This note sounds for five hours. At the end of this time the prisoner is brought out. He is invariably blind. The Lamas say the sound does it. Dr. Ffarson, who was with the expedition, examined the eyes of a number of these men and found the optic nerve entirely destroyed."

So much for the scientific principle. Now, as to Caruso:

Dr. Lloyd says: "Caruso's bones are more resonant than are the bones of other persons. For instance, if you tap one of his knuckles with your forefinger, it gives out a higher pitch, and more resonant tone than those of the average person's knuckles."

But this extraordinary susceptibility to vibration exists absolutely throughout Caruso, even to his cartileges and muscles. Dr. Lloyd remarks further:

"Another point is that the vocal cords are fully an eighth of an inch longer than any other singer's I have examined. They are also extraordinarily vibratile. When he sounds his high C-sharp they vibrate 650 times a second, which is phenomenal for a man, whose voice is pitched an octave lower than a woman's."

In this respect, therefore, Caruso is more than normal—he is a phenomenon, a veritable human sounding board, his whole physical structure more resonant and sympathetic to sound vibrations than any other human creature.

To assert in so many words that it is possible for a sustained musical note of a certain precise pitch and quality to shatter Caruso's physical organism is, of course, something that no scientific man of established reputation would do. One of the experimenters above referred to, however, consented to present the case in the following significant words:

"There is no room for doubt that Caruso would suffer serious physical inconvenience if he should be subjected to the influence of a powerful and prolonged musical tone of the exact pitch to which his highly resonant body is attuned. Much experimenting would be required to determine that pitch—though it has been noticed by his opera comrades that the great tenor exhibits signs of distress in the few instances in his repertory where the solitary, prolonged note of middle F sharp is produced by the slide trombone.

"Caruso's only real danger, if any, is the slight one of accidentally encountering the vibrations set up by that precise note, produced by some means outside of his usual activities as an opera singer. The thickly inhabited centres of the world are filled with all sorts of sound vibrations, of all pitches and qualities, produced by a thousand different means. There is, of course, a possibility that circumstances—or fate, if you prefer that way of looking at it—might bring Caruso and those shattering vibrations into conjunction.

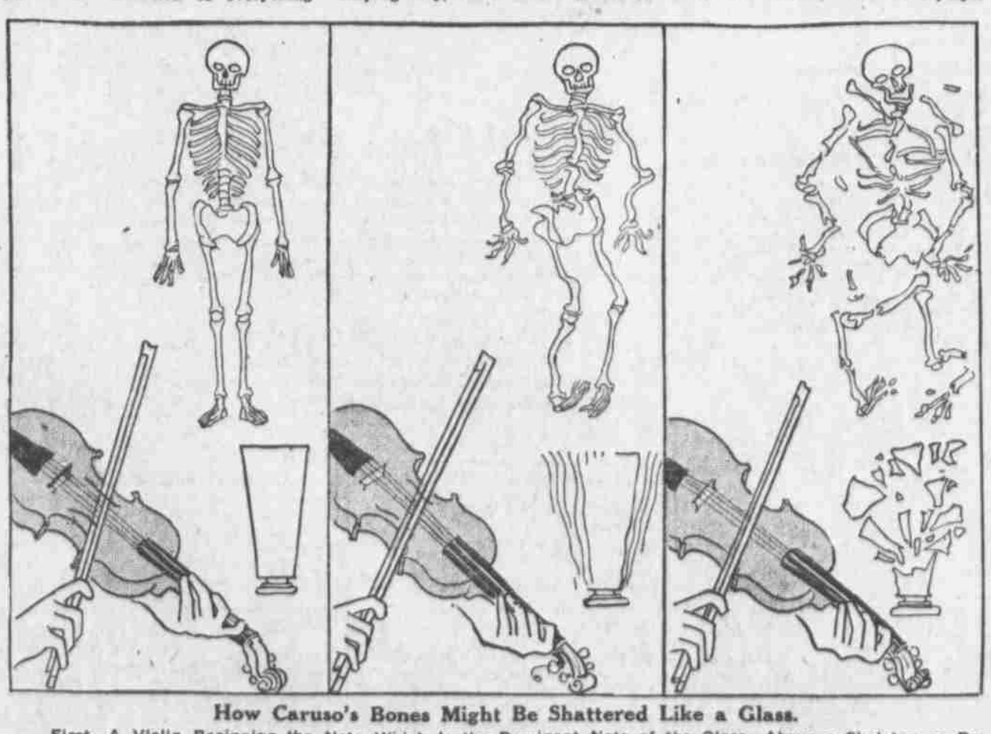
"In the case of ordinary human beings, it would be expected that each individual bone in the skeleton would possess its own 'dominant note.' In such a case—if the bones were sufficiently resonant and sensitive to be affected by sound vibrations at all—one might be shattered by such means, while the others would be disturbed only slightly, through sympathetic contact.

"The instance of Caruso becomes interesting, and important, in a scientific way, through this discovery that his entire physical organism is a musically resonant unit—the vibrations set up by the fatal note would attack the whole man. It is not inconceivable that the results might be disastrous."

It can truthfully be said that the great tenor is in a state of constant apprehension lest some accidental and not to be escaped encounter with the sustained "dominant note" inherent in his own bodily structure shall set up physical disturbances of sufficient gravity to end his professional career, if not to make of him an invalid for the rest of his life.

That, it is now learned, is the main reason for those nervous claspings and unclaspings of his hands, so characteristic of Caruso when off the stage, and which are plainly indicated in many of his photographs. He realizes that his danger is not in connection with his professional work, because at rehearsals or during the performance of opera he cannot be subjected to the influence of any single, long-sustained tone; the notes of the orchestra and of the voices are mingled in constantly changing pitches and harmonies, each, therefore, neutralizing the sympathetic vibratory effect of the others.

But when walking along the street, when traveling by train or steamship, even when entrenched within his own four walls, he may be said to be constantly in the mental attitude of a man dodging some anticipated mysterious physical attack—in his case the physical attack of sound vibrations which his body could not resist.



How Caruso's Bones Might Be Shattered Like a Glass.

First—A Violin Beginning the Note Which Is the Dominant Note of the Glass—Above a Skeleton as Resonant as Caruso's. Second—The Dominant Note Is Found and Under Its Vibrations the Glass Begins to Quiver—Just as Caruso's Skeleton Would Begin to Quiver Under Its Dominant Note. Third—The Prolonged Tone Has Set Up Such Enormous Agitation Among the Molecules of the Glass That It Bursts to Pieces—Just as Caruso's Bones Might Burst to Pieces Under the Prolonged Vibrations of Their Dominant Note.

"Somewhere lurks one sound which conceivably can so set every molecule of Caruso's skeleton vibrating so rapidly . . . as to tear the great tenor apart. . . . It may even lurk in the penny trumpet of a street urchin!"