

processor and winged a number of quiet notes in my direction. This demonstration was more successful than planned, because as we returned to the kitchen I saw that I had forgotten to switch off my recorder, and in the spinning back and forth of the tape to locate the position prior to going outside, we heard, clear as a bell, the reaffirmation of the carrying power of Hugo Dalton's mandolin.

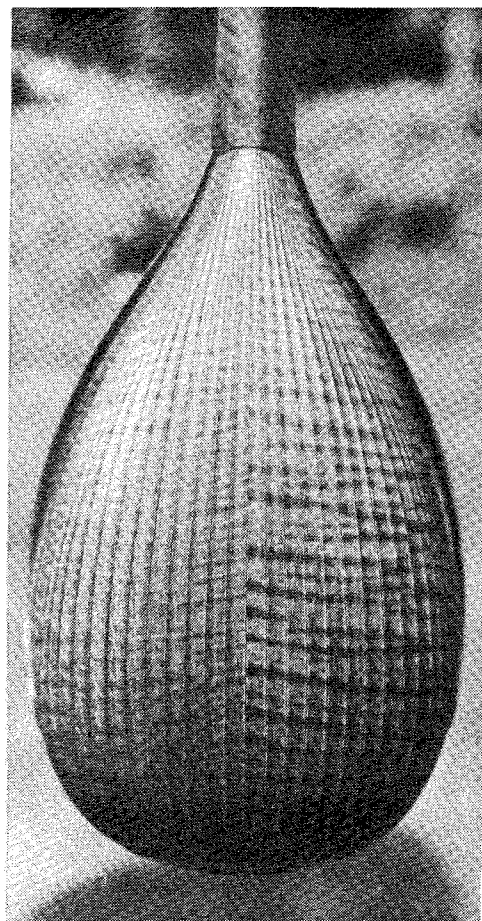
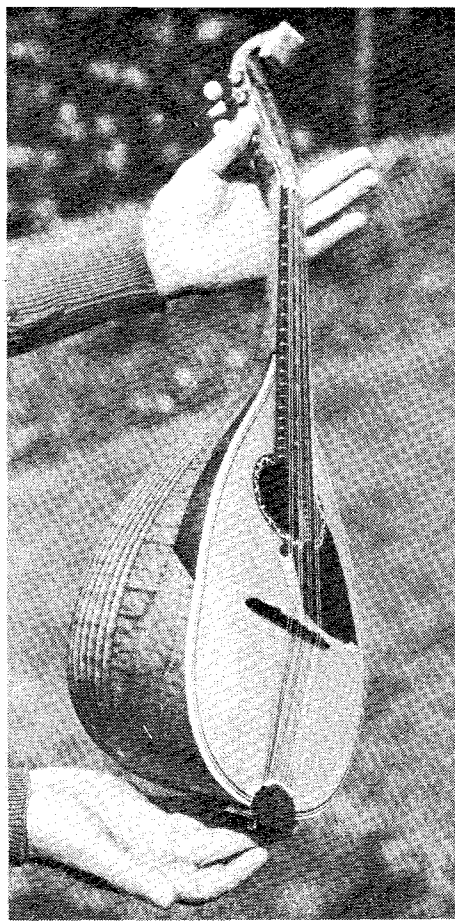
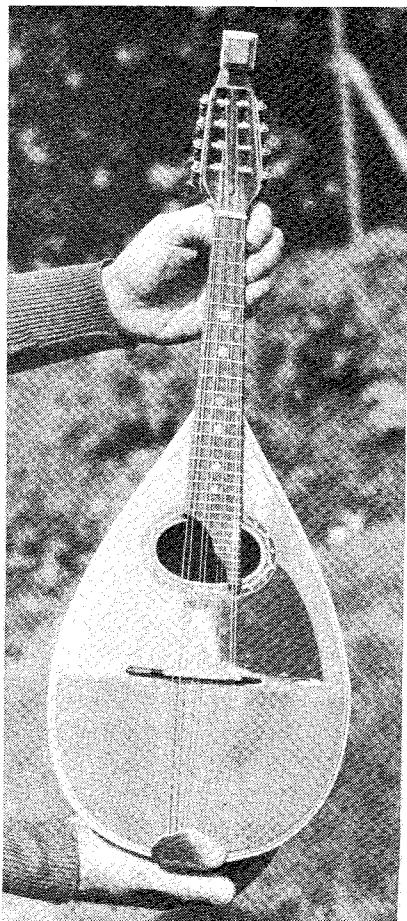
'The one I regard as the Stradivarius of the mandolin is the Luigi Emberga' said Hugo as he passed the mandolin to me. 'unfortunately the Emberga line is now finished. Luckily I have two; that one, made in 1958 and which I use for solo work, and another which has more brilliance and volume. Of course the Japanese have sprung up with the mandolin. They have some very beautiful craftsmanship in them and the tone is quite acceptable. And rather than buy some cheap, knocked about Italian instrument, I always advise the intending learner to get one of these. But it is important to have a good instrument. If I'm playing in a hall where I've got to let the instrument please a thousand people I must know the instrument and which instrument is going to do it. The cheap fiddle will not transmit to two thousand people and that goes for mandolin too. Witness Mahler's Symphony of a Thousand, where at the Albert Hall you have a thousand performers - virtually, although I don't think anybody has achieved that. One mandolin is included and we do know that it can be heard from all points in the hall. It's the quality of the sound: once the note is produced it's indestructible. It's all to do with the high harmonic content, no fiddle has the degree of harmonic content the mandolin has.'

One perplexing (to me at any rate) phenomenon of sound is, how a loud note from a cheap instrument can decay quickly yet a quiet note from a good instrument sustains and carries far. 'I think persuasion from the player is the first gift' said Hugo. 'if Segovia were to thrash a note out to make sure it was heard then we'll never get to it since the note was lost as soon as it left the guitar. Likewise if a fiddler exaggerates his playing beyond a certain fortissimo, he produces noise not a note. You might argue with me about this but I've heard it, and a loud open G is a diabolical sound if over-played. It's nothing to do with an open G.

Most especially does this apply to the mandolin; if you don't play within the brackets you cause noise not a note. Therefore you have to be delicacy beyond understanding. Mind you, Mahler wasn't silly, he writes the mandolin into a quiet point just after a passage of vast sound. He causes a vacuum in the ears because he threads the scoring down so that the next thing that's going to be heard - and undeniably heard - is the mandolin. And even then it's written as piano. So it's a great piece of orchestration.

'But we mustn't forget the mystery of the individual instrument. What makes a note carry from one instrument yet not from another? There doesn't appear to be a scientific or mechanical answer. I've had a pretty good training in engineering and I've a lot of scientific application inside me, and I've attempted to use this to probe these mysteries. And the more you probe the more you find there is no apparent explanation. Consider the harmonic degree of a symphony orchestra playing together; the multitudinous vibrations going on plus the fact of the very high harmonics in brass. In my opinion the complexity of that in a hall is beyond any computer built today - or the knowledge of anybody in science. So we return to the mystery of music. And I'll almost defy anyone to argue with me on the subject.

'I'm talking about live music, of course; on a recording you can't get to the mystery. A famous conductor said that the microphone was the "other instrument in the band". I say it should never have been invented. The one place where music should be heard is in the concert hall, or church hall . . . any hall; because that is the very heart of music. Resonance? - That's the only resonance. For me every record is a down right lie. There is no recording company that has recorded the mandolin satisfactorily. It's been found under test that the instrument wanders freely in harmonics up to 65,000 cycles per second and you get resultants from these harmonics which blend to make up the whole. Brass can go as far as 200,000. But I'll give you an illustration of what I'm talking about: We were recording out at Denham with Eric Spear. We were in a tightly padded cell called a studio - all resonance taken away so that the engineers can handle your subject. The orchestra finished on a chord and after the chord had finished there was this peculiar sound hanging on. Well, at first



*The Luigi Emberga mandolin*