

Book Review

Musical Acoustics, Part I, Violin Family Components
Musical Acoustics, Part II, Violin Family Functions

Edited in the series: Benchmark Papers in Acoustics, Carleen M. Hutchins, editor.
 Publisher: Dowden, Hutchinson and Ross; Halsted Press (Wiley) USA, Part I, 1975, p. 476, Part II, 1976, p. 379

These two volumes on musical acoustics are devoted to the acoustics of stringed instruments. The editor of both volumes and the author of a part of one book is Carleen M. Hutchins, Permanent Secretary of the Catgut Acoustical Society.

This efficient and active Society links both scientists and artists interested in research on musical instruments.

The volumes under review were conceived as a selection of the most important contributions dealing with the acoustics of the violin and other related instruments.

Part I, *Violin Family Components*, consists of 29 articles arranged in six subgroups.

1. *General Papers on Violin Acoustics* by HUTCHINS 1962, SAUNDERS 1937, MEINEL 1957, ITOKAWA and KUMAGAI 1952, SCHELLENG 1963, CREMER 1971.

2. *The Bowed String* by RAMAN 1916, 1918, 1921, BLADIER 1931, 1964, SCHELLENG 1973, CREMER 1972, 1973, FIRTH and BUCHANAN 1973.

3. *The Bridge* by MINNAERT and VLAM 1937, BLADIER 1960, REINICKE 1973.

4. *The Soundpost* by SAVART 1840, SCHELLENG 1971.

5. *Wood for the Violin Family* by KRÜGER and ROHLOFF 1938, ROHLOFF 1940, BARDUCCI and PASQUALINI 1958, FUKEDA 1950, 1951, BELDIE 1968, GHELMEZIU and BELDIE 1972, FRYXELL 1965.

6. *Varnish* by SCHELLENG 1968.

Part II, *Violin Family Functions*, consists of 33 articles grouped into an introduction and three subparts.

Introduction by HUTCHINS 1973.

1. *Body Vibrations* by SAVART 1840, BACKHAUS 1930, 1931, MEINEL 1937, EGGERS 1959, BELDIE 1969, AGREN and STETSON 1972, REINICKE and CREMER 1970, HUTCHINS, STETSON and TAYLOR 1971, JANSSON, MOLIN and SUNDIN 1970, JANSSON 1973.

2. *Radiation* by SCHELLENG 1968, MEINEL 1937, SAUNDERS 1946, 1953, HUTCHINS, HOPPING and SAUNDERS 1960, LOTTERMOSER and MEYER 1957, 1962, LOTTERMOSER 1958, 1968, MEYER 1972, LEIPP and MOLES 1959, KOHASI and TOKITA 1954, FLETCHER, BLACKHAM and GEERSTEN 1965, FLETCHER and SANDERS 1967, JANKOWSKI 1966, MATHEWS and KOHUT 1973.

3. *Musical Focus* by HUTCHINS 1967, HUTCHINS and SCHELLENG 1967, SAUNDERS 1940, ROHLOFF 1964, BOOMSLITER and CREEL 1972.

The selection presented is only a small part of a vast literature devoted to the acoustics of stringed instruments. The selection is relevant, presents large range of topics and permits acquaintance with the works which, while often referred to, are practically unavailable to interested readers, e.g. the remarkable works of Savart from the first half of the last century and some fundamental articles by BACKHAUS and SAUNDERS. Each article or group of articles is provided with editorial comments. Concise information about authors as well bibliographical references of their works dealing with related subjects are given. Also the references to selected literature by other authors are cited.

The original language of 42 of the articles (out of 62) is English, some are translations into English (including Japanese works). The remainder are written in German (15), French (4) and Italian (1). The se papers have summaries or shortened versions in English.

Among the various famous works published in these volumes, the most striking ones are the pioneer works of F. SAVART which present valuable methods and observations, the fundamental work of SAUNDERS, and a remarkable article on wood properties by I. BARDUCCI and G. PASQUALINI.

It should be also pointed out that the interest in acoustics of stringed instruments has much increased in the 1970's. New outstanding papers included are e.g. by J. C. SCHELLENG, L. CREMER, E. V. JANSSON, C. M. HUTCHINS, and others.

This book, being an excellent and carefully compiled reader, is on the one hand evidence for the growing interest in the field and, on the other hand, it may be considered as an enlightening guide for those who intend to direct their research to the field of the acoustics of musical instruments.

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