

corpus luteum. A good discussion of lipid cell tumors follows. The author also discourses interestingly on so-called testoid hyperthecosis. However, when he states that ovariectomy must be the treatment for this ill-defined state (p. 74), one may well question the wisdom of his recommendation.

Under tubular adenomas there is a good discussion of the tumors commonly referred to as arrhenoblastomas. Also included are the small, not uncommon, so-called rete adenomas. The author's logically presented reasons for the term tubular adenomas fail, however, when he includes those tumors which show no identifiable tubular elements but are associated with virilizing phenomena.

The heading "Ovarian Common Cysts," as used (p. 98), is confusing, because the discussion actually concerns cystic neoplasms, *i.e.* cystomas.

The sections on endometriosis and teratoid tumors are excellent. It would have been helpful, however, if the author, in discussing dermoid cysts, had more fully evaluated the relative importance or unimportance of X-ray studies in their diagnosis (p. 235). It is also confusing to note so many illustrations labeled as "dysembryoma," since the term is hardly utilized in the body of the text.

The final section is given over to nonepithelial ovarian tumors.

The illustrations throughout the text vary from indifferent to excellent. A 60-page list of periodicals which concludes this volume might well be included in the bibliographic volume in future editions.

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Musical acoustics. (2nd ed.) Charles A. Culver. Philadelphia: Blakiston, 1947. Pp xiv + 215. (Illustrated.) \$3.00.

At the recent meetings of the Acoustical Society in New York physicists and engineers mapped grand strategy for a peaceful invasion of the field of music. Prof. Culver's book constitutes somewhat of an insurance policy to future generations of musicians that the invasion will remain a peaceful one; or, if this invasion should prove less peaceful than advertised, it guarantees to those musicians who will study it that they will at least be able to understand the language in which the peace treaty may be written.

Musical acoustics is a useful and readable book for those interested in the physics of music. It should also bring reading enjoyment to a much wider audience. It should prove most valuable, however, as a text in a one-semester course for music majors. The book is written at a level appropriate to the usual background and needs of such students.

An introduction to certain general principles of acoustics is followed by chapters on hearing, pitch, and quality. From there we go to a discussion of somewhat more technical topics such as musical intervals, temperament, consonance, and dissonance. The author never tries to draw up a musical code or to arrive at aesthetic judgments on the basis of cabalistic juggleries; on the contrary, he invites the reader "to maintain an open mind with regard to the possible adoption of new forms of tonal expression."

The second half of the book is given over largely to a comprehensive treatment of the production of musical sounds by the more important instruments. Here we find a wealth of oscillograms and sound spectrograms, many of which have

been taken by the author himself. Prof. Culver's own contributions to experimentation in this field—the harmonic analyzer for unsteady musical sounds and the Syntheophone, which produces entirely new musical sounds—find their natural place in these surroundings. In the last part we find a chapter on "The Acoustics of Rooms," followed by a rather brief chapter on "Electronic Musical Instruments."

In this second edition Prof. Culver concludes with a discussion on the recording and reproduction of music. Beyond this substantial addition there are entirely new sections on the Doppler effect and transients and an enlargement of the section on vocal organs and the voice.

In the spirit of constructive criticism, which Prof. Culver invites, this reviewer would like to make two minor points. It should be possible to replace many of the oscillograms by more distinct ones. Some progress in this direction has been made in this edition, but there is room for more. Also, nowhere in the book do we find a discussion of auditory masking, though its importance for composers and orchestrators can hardly be overlooked.

All in all, Prof. Culver's book points the way toward a more sympathetic cooperation between the scientist and the musician in their very pleasant task of making man's life richer and more beautiful.

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Russian-English technical and chemical dictionary.

Ludmilla Ignatiev Callahan. New York: John Wiley, 1947. Pp. xvii + 794. \$10.00.

It is to be regretted that this dictionary was not made available some five or six years ago, when the need for such a book was very urgent. It is more than a chemical dictionary, for it includes a fairly complete coverage of mineralogy, metallurgy, mining and geology, general engineering, machinery and mechanics, electrical engineering, pharmacy, and botany, as well as other pure and applied sciences.

The book is generally well done and contains less than the expected number of deficiencies for a first edition. A number of possible meanings provided for each Russian word may be considered as adequate. The lesser deficiencies may be typified by the translation of "АЛЮСТЪ," which is really a state of redness rather than "ruby color." The translations of a number of compounds in the phosphorus family do not conform to the accepted nomenclature and may be misleading; thus, "ФОСФИНИСТАЯ К." should be -phosphonous acid, and "ФОСФИНОВАЯ К." should be -phosphonic acid. The reviewer feels that the inclusion of the letters of the old orthography should have been permitted because of the existence of a considerable amount of pre-Soviet literature. This is compensated for, however, by a number of highly desirable features: translations of numerous abbreviations, a listing of word endings, and a good coverage of idiomatic phrases.

Although the appearance and legibility of the book are very good, one would expect a more durable binding for a book of this size (and price) than the "flexible" one provided. A thumb index should also have been provided to facilitate the use of the book by persons not fluently familiar with the Russian alphabet.

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