

principle, the congregational emotion appropriate to collective worship. It seems to us that he is thinking back from the standpoint of later modes of thought. The idea that congregational music ought, in its very structure, to typify the "e pluribus unum," so to speak, of the congregation, does not seem to us likely to have occurred *a priori* to the musicians of the ninth century; nor is there any proof alleged that this view was taken, even *a posteriori*, by any thinker of that age. The Christian congregation had existed for eight hundred years without, apparently, feeling any need of such a mode of expression; and during that period its religious fervor had certainly not grown stronger, but much weaker, than it had been in the Catacombs. We think that a truer explanation is to be found in the waning of genuine religious feeling. Real and profound religious emotion makes, but slight demands on art of any sort, while conventional religion and genuine but shallow religious feeling need the aid of elaborate art, and of that self-delusion which mistakes sensuous impressions received from without for true spiritual and inward emotion. If we are not mistaken, we must, then, include the birth of polyphony in the chapter of those timely accidents of which genius, in every age, has so readily availed itself.

However this may be, the recognition of chords, or simultaneous consonances, first appears in the ninth century, and in a form which shows great advances in the interval between our extant records. New chords, and even discords, are admitted; and there is a greater independence of the vocal parts. The part-singing of this period is called Organum, or Diaphony. The parts might be four; but two were mere repetitions of the two others; of the principal voice one octave below, and of the lower voice one octave above. The author gives numerous examples of this Organum, in one of which (on page 55) there seems to be an error in transposition, E G (three semitones) being represented by F A (four semitones). The explanation of this, not given by Professor Wooldridge, may be that the mediæval theorist was transposing by scales and not, as we do, by notes. The Scholia Enchiriadis quoted on page 53 actually profess this view.

To the strict Organum succeeded, not much later, our author thinks, the free Organum, in which the accompanying voice did not always follow the principal voice note by note. The origin of this is found in the necessity of avoiding the tritone—an interval of three whole tones (as F B), which the musicians called "Diabolus in Musica," the Devil in Music. Here we see how faults in systems lead to new discoveries. This necessity of avoiding the "Diabolus" caused a long stride to be made toward the still unsuspected goal of polyphony; that which had been resorted to as a remedy being now adopted for its own sake.

Guido d'Arezzo is now the chief exponent of musical theories; for we have reached the eleventh century. The intervals used to avoid the tritone are now studied and freely used, an advance which our author inclines to attribute to the readoption of the Greek scale. We are more inclined to see in it an effort to shake off theoretical dogmatism, a common phenomenon in the progress of all art, where Nature and Truth are ever pro-

testing against canons of human invention. Guido yielded to this superior guidance, and the hesitancy and inconsistency of his alleged reasons are only a tribute to the authority of prevailing methods and prejudices.

Professor Wooldridge seems to undervalue the part of Guido in the advance of the musical art of the age. It is true that, after his death (about 1050), there was a reaction. The "passing" discords allowed between consonances disappear; and, in the new Organum, first expounded about 1100, there is a return to strict consonances. Variety is obtained only by the use of different modes of progression. But this led to constant efforts to write many different vocal accompaniments to one and the same melody, and the result was the creation of real third and fourth parts, no longer, as before, mere repetitions of the principal part and its Organum. Here, as the author himself admits, real progress was made by the irregular Organum of certain pieces in which all prohibitions against dissonances were disregarded. So that Guido, after all, had not wrought in vain.

The subject of Discant, or measured music, in which the consideration of rhythm (i. e., tempo apart from its speed) held the first place, is too technical to be discussed here; and the same may be said of the chapters on notation, in which the author has put some of his best work. The strict rhythms of this period are sometimes agreeable; but they confined composition unnecessarily and were doomed to a speedy end, like all arbitrary restraints in art, the true progress of which always lies in judiciously breaking rules. Their monotony led to violations, or to clever evasions, of the rules; and these soon became the usual practice. The free use of consonances led to new views as to the movement of the voices; and, at a time roughly estimated as between 1290 and 1300, we see Discant coming very near to plain Counterpoint. The elements of composition were still Tenor and Discant, but the Discant was no longer metrically enslaved to the "subject." Consonances were required in the strong beat of the measure only. "Composition at this time [with which this volume closes] was weak and tentative, deficient in resource, hampered by its conditions—the effect harsh, empty, and harmonically pointless." The prevailing forms of composition were the two kinds of Organum, the Cantilena, the Rondel, the Motett, the Hoquet, and the Conductus; the last two being to us mere names.

The Rondel will interest every reader who knows or enjoys music. The most famous example, the English rondel "Summer is icumen in" (date about 1240), given here in several versions, is a composition of which any age or any people might be proud. The nameless author may be classed with the many great men who are personally unknown to us *quia vate carent*. The volume ends with many examples of rondels and motetts, covering some seventy pages.

Of Professor Wooldridge's work we cannot speak too highly. It is difficult to overstate the enormous labor and difficulty involved in unravelling the tangled mass of facts with which he had to deal; and the result is more satisfactory than could have been expected even from such diligence and so much ability. The "make-up" of the book is what we have learned to expect from the Clarendon Press. We have noted very few misprints, and those of no great

consequence, as "Sancta Spiritus" on p. 378. One curious mistake seems, however, to have been made in the account given of the manuscript in the Laurentian Library, at Florence, from which so much of the author's material is drawn that, without it, this book could not have been written. We are told that the MS. is marked "Plutarch 29. 1." Now, a dialogue on Music is indeed found among the works of Plutarch; but this MS. does not contain a line of it. On the other hand, the MSS. in the original Laurentiana are all marked "Plut.," with two numerals following; the letters "Plut." standing for some form of the word *pluteus*, which merely means a book-case.

*Studies of Trees in Winter: A Description of Deciduous Trees of Northeastern America.* By Annie Oakes Huntington. With an introduction by Charles Sprague Sargent, LL.D., Director of the Arnold Arboretum and Author of 'The Silva of North America.' Illustrated with colored plates and photographs. Boston: Knight & Millet. 1902.

*A Handbook of the Trees of New England.* By Lorin L. Dame and Henry Brooks. Boston: Ginn & Co. 1902.

Those of our readers to whom it was permitted to make use of the excellent 'Arboretum et Fruticetum Britannicum' of Loudon can never forget the pleasure given by the winter days when, through the windows, the leafless branches of the trees, still or swaying, served as fascinating objects of comparison with the sketches in the book. The eight volumes of Loudon were not convenient handbooks for field use, and therefore gave one an additional excuse for staying by the open fire, indoors. The 'Studies of Trees in Winter,' brought within convenient compass of a manual, must take away this excuse for fireside examination of our beautiful winter vegetation. One can now enjoy the study of our oaks and maples and ashes in the crisp bracing air of the lengthening days. It is possible for even the least observant person to familiarize himself with the more common of our trees in winter, and watch the coming of the miracle of spring.

It is well known to all thoughtful persons that the buds of our trees and shrubs represent the most admirable adaptation to surroundings. In the equatorial belt, where plants have the weather quite their own way, and where, year in and year out, they take no thought for hard times coming, buds, in our Northern sense of the word, have scarcely any existence. Our buds stand as examples of survival, through countless generations, of the hardy stocks which could meet sudden emergencies in the most variable climates. Alfred Russel Wallace and Grant Allen have found in buds illustrations of deep interest touching the great subjects of variation and survival which they have had most at heart. An attentive examination of the myriad forms of buds, identifiable by means of this admirable work, will add much to the interest of the winter walks until the coming of the spring. And then can be substituted for this study the use of the handy book on 'The Trees of New England' by Dr. Dame and Mr. Brooks. These authors have covered the ground in an attractive and successful manner. Their descriptions are truthful

and interesting, their plates are excellent, and, in short, they have produced a convenient and safe guide. We congratulate the lovers of trees in our Northern States upon the admirable textbooks which are now within very easy reach.

There are many encouraging signs of a deepening interest in our trees as trees, and in forests as a precious heritage. Every good handbook which serves to increase this interest must be heartily welcomed.

*A Dictionary of Architecture and Building: Biographical, Historical, and Descriptive. By Russell Sturgis and Many Architects, Painters, Engineers, and Other Expert Writers, American and Foreign. In three volumes. Vol. III., O-Z. The Macmillan Co., 1902.*

The appearance of this third volume marks the completion of a work which will doubtless for many years remain the standard encyclopædic dictionary of the subject. Upon the appearance of the first volume, we described in these columns the form and scope of the undertaking. We will now confine ourselves to some account of the contents of the third volume. The Dictionary, as a whole, is marked by the fortunate selection of its writers, and the appropriateness of these selections is no less evident in the third than it was in the preceding volumes. To take a single case: the whole subject of the use of colored glass in windows has been committed to the care of Mr. John La Farge, who has approached the matter not merely as an historian (for as such he treats it with all necessary fulness), but as an artist familiar with the technique of the material and the limitations and possibilities of the art of the window-maker. The part of his article devoted to the colored window in America is particularly interesting, since Mr. La Farge was among the foremost in developing that art. He therefore speaks from an intimate knowledge of the aims of the early workers and the difficulties they had to overcome.

Among the articles in the present volume upon the history of Architecture, the most notable are those of Mr. R. Phené Spiers upon Roman Imperial Architecture and upon the architecture of certain Eastern countries; of Mr. C. H. Blackall on Spain and Portugal, of Prof. A. D. F. Hamlin on Scotland, and of Professor Frothingham on Sicily. The latter writer also contributes an article on Pelasgic architecture, which he defines as a style of building prevailing in the pre-Hellenic world, in addition to two styles of early date, found one in the valley of the Nile, the other in the valley of the Euphrates. Probably the longest single article in the present volume is that upon Architecture in the United States, being Mr. Montgomery Schuyler's exhaustive treatment of the subject from pre-Columbian times to the present day. Nor should we fail to mention Mr. W. P. P. Longfellow's article on Romanesque Architecture, or his still more interesting treatment of the subject of Round churches. Among articles dealing with parts of buildings are especially to be noted two by Professor Babcock, one on Pendentive, the other on Vault, both particularly to be commended by reason of the exhaustive series of diagrams with which they are illustrated. These diagrams, although they would have been equally useful had they been given at a much smaller scale (a

statement true of nine-tenths of the illustrations in the Dictionary), form with their succinct text so valuable a presentation of their subjects that one regrets that the same method has not been employed more generally throughout the work.

Upon Aesthetics the chief article contained in the present volume is that of Mr. Henry Rutgers Marshall on "Truth in Architecture," a discussion of the expression, in design, of the essential facts of the plan and structure. The most important article on building materials is that by Prof. George P. Merrill on Stone, an inquiry into the nature, use, and source of the stones most frequently employed in construction, with special reference to those occurring in the United States.

It need only be added that the great mass of definitions and of brief articles contributed by the Editor is up to the standard of the earlier volumes, and that the biographies of architects are as complete as heretofore, to show that the work has been carried to a conclusion in precisely as satisfactory a manner as the first volume justified us in anticipating.

*Letters on Life. By Claudius Clear (Dr. W. Robertson Nicoll). Dodd, Mead & Co. 1901.*

Only a hardened critic could refrain from laying aside his scalpel when an author, in his first chapter, makes a clean breast of his own ideals by declaring that "the highest wisdom is to be found in commonplaces." Dr. Nicoll has here suggested the obvious comment on such statements as that there cannot be good conversation between two people unless they are united by a feeling of sympathy; that many persons have their heads turned by sudden success; that the first condition of learning is humility; that it is perhaps wise now and then to have a pause if one is engaged in work which strains one's faculties; that what is work to one man is play to another; that it often happens that one who writes brilliantly does not talk in the same way; that men who are charming in society may be bores at home, etc., etc. Yet, in spite of its likeness in this respect to the immortal masterpiece of Martin F. Tupper, this volume is not only readable but even stimulating. Its commonplaces are presented as "confirmed and illuminated by experience." Dr. Nicoll's illustrations are drawn from a wide range, from Rousseau to Mrs. Oliphant, and some of the best are incidents related as having happened to friends of his own. The author shows his belief in his proposition "that literature is autobiography" by adding that personal element which is essential to good essays. His confessions respecting his visit to a palmist, his weariness of the sunshine of the Riviera, and his inability to make notes of what he reads, were well worth putting on record for the encouragement of weaker brethren.

The leading characteristic of the book is a homely and kindly good sense, expressed in a clear and unpretentious style and relieved by a pawky Scotch humor. With all its platitudes, not a few shrewd hints are scattered here and there; as, for instance, that many people would be much better talkers if they could even slightly enlarge their vocabulary, and that the holiday that does us most good is not the one we enjoy most, but the dull holiday. Dr.

Nicoll is to be congratulated also on his skill in the choice of topics. Such titles as "On the Art of Taking Things Coolly," "The Sin of Overwork," "How to Remember and How to Forget," and "Should Old Letters be Kept?" whet the reader's appetite immediately, and it is not disappointed by the manner in which these subjects are treated. The lessons of "the American invasion" are expounded in three papers, one of which is based on Elbert Hubbard's "Message to Garcia," though Mr. Hubbard will probably regret to learn that the name of the author of that famous pamphlet is not given. The points in our own business policy which Dr. Nicoll especially approves are that American employers fire out the fools, pay good men well, and take good men into their confidence. Elsewhere Dr. Nicoll expresses the opinion that "America is not nearly enthusiastic enough about her choicest spirits," and alleges in evidence the neglect at Litchfield of the Beecher traditions of the place. We learn with much pleasure that the author's domestic cat, which can endure listening to most of the minor poets, could not stand some of the Laureate's "laborious trash" about the union between England and America, but deliberately left the room after hearing two stanzas.

*The Labyrinth of the World and the Paradise of the Heart. By John Amos Comenius (Comenius). Edited and translated by Count Lützow. E. P. Dutton & Co. 1901.*

Comenius is famous as an educational reformer; his memory has been piously cherished by the Moravians, and something of his travels and trials is generally known. But what his compatriots regard as his most important book—more valuable than the *Janua Linguarum*, which was long used in schools, or the *Orbis pictus*, or his later "pansophic" works—has been little known except to Bohemians. "The Labyrinth of the World" was written in 1623, and first printed in 1631, "probably either at Lissa or at Pirna in Saxony." An enlarged edition appeared at Amsterdam in 1663, and was reprinted at Berlin in 1757, and at Prague, 1782 and 1803; this last edition was suppressed in 1820. Within the last half century there have been many editions, always in Bohemian. German translations, abridged or adapted, appeared in 1781, 1787, and about 1872. Others exist in Hungarian and Russian. Count Lützow, of the Bohemian Academy, now publishes a careful English version. His apologies, as writing in a language not his own, are unnecessary, for his work is well done, and discloses to "the largest public of readers in the world" what is at the least a literary curiosity, and (as he assures us) a beloved national classic. Parts of it are now read in the Bohemian schools for the style; and the song of the Bohemian exiles celebrates it with their vernacular Scriptures: "Nothing have we taken with us, everything is lost; we have but our Bible of Kralice and our 'Labyrinth of the World.'"

The "Labyrinth" is a satirical allegory, introducing a shorter devotional work. The author, in his dedication to his patron, the Baron of Zerotin, says, "The first part depicts the follies and insanity of the world, showing how, mainly and with great labor,