INTRODUCTION.

After the battle of Culloden in 1746, a very stringent disarming act was put in force throughout the Highlands of Scotland. It is wonderful to think how many things became illegal as well as dangerous. Not to mention kilts, the bagpipes seem to have caused as much consternation to the British Government of those days as I have myself seen raised by my own stand of pipes in the mind of a French customs house officer at Boulogne. Judging from what I have read in the Scots Magazine of 1745-46, (a much valued copy of which was given to me by an old college friend,) it was, in those days, often as much as a man's life was worth, if he were convicted of being a piper. Naturally, under such circumstances, the piobaireachd, which, up to that time had been the natural expression of the musical genius of the whole of the Highlands, languished, and threatened soon to become as extinct as the dodo. It was in the reign of good King George III and towards the end of the last century that wiser councils began to prevail, the anti-Highland panic having subsided, a reaction in favour of Highlanders set in, and Highland Societies were established. One of the first efforts of these societies was directed to the rescue, as far as possible, of the piobaireachd music.

One, "Donald MacDonald," a piper and maker of bagpipes, turned his attention to writing down this music in ordinary music notation. In those days a musical education was anything but easily acquired by any one, the mysteries of correct time were probably known to few, and those of metre to still fewer. However, MacDonald tackled the task with a brave heart, and, attracting the attention of the Highland Societies, was by them subsidised to collect and note down as much piobaireachd music as he might find extant. Judging from his name, he was probably a Skye man or a west Highlander by birth, and as such would accordingly naturally first bend his steps in that direction when prosecuting his researches. It is more than likely that to MacDonald as collector, almost as much as to the MacCruimeins and MacKays as performers and composers, the west Highlands owe their present pre-eminence in piobaireachd music. The east Highlands, no doubt, at one time had their own pipers enjoying a local reputation quite equal to that of the MacCruimeins in the west, but, for want of a MacDonald, their works are now lost to us, "Craig Ellachie" the Grant's gathering, being the only noted piobaireachd belonging to Strathspey, for instance, which I can at present call to mind.

The first fruits of MacDonald's labours appeared in print as a "first volume" containing twenty-three piobaireachdan. There is no date to the book, but I think it must have been published about 1806, as shortly after this he received recognition of his services (a Highland Society's medal, if I remember right) at one of the annual competitions, (the forerunners of the present northern meetings) which were then becoming very popular in Scotland. In this published volume MacDonald promised to give histories of his airs in a succeeding volume, but I am afraid his notes pertaining to it have been lost, and will never see the light of day.

I am not sure, but I think that MacDonald taught the pipes to my grandfather, the late Mr. J. W. Grant of Elchies in Strathspey, who was an enthusiast on the subject of the piobaireachd, an enthusiasm apparently transmitted to myself, to my son, and judging from present appearances, apparently destined to be transmitted to my grandchildren. My grandfather served in the Bengal Civil Service 45 years, without once getting home. In those days furloughs were rare indeed, and letters from England via the Cape occupied in transit generally twice as many months as they now take weeks. Many a time and oft did my grandfather,—as he used to tell me,—write from India to MacDonald beseeching him to send him his copy of the 2nd volume, so long promised to the public; but all in vain, as no answer came. He had quite given up all hopes of hearing anything more on the subject when, to his great joy, one day there came to hand the much longed for 2nd volume in manuscript. With the book was a plaintive letter from MacDonald begging my grandfather's acceptance of the book, as no one had shown so much interest in it as he had, and the publication of the first volume had almost ruined the donor.

So highly was this gift prized that Mr. Grant at once had a copy made of it by one of his daughters. This copy together with the old man's pipes, (of MacDonald's make,) were hauded over to me on my getting my commission in the Engineers in 1852, and as well as a large quantity of other piobaireachd music, copied for me by my aunts, the Misses Grant, it accompanied me to India—only alas! to share the fate of the rest of my worldly goods at Delhi, where I was stationed on the day of the Mutiny on May 11th, 1857. The loss to me at the time seemed irreparable, but, as far as the public are concerned, it is not so, nearly all the lost music having been now replaced. The original of MacDonald's 2nd volume, with historical notes pertaining thereto, was bequeathed to me by one of my aunts the year before last, and will be found incorporated in "Ceol Mor," which I hope soon to publish.

The publication of some such book as "Ceol Mor" seems to be imperative, if piobaircachd playing is not to die out altogether; for not only is MacDonald's published volume no longer obtainable, but the later publication of 1839 of Angus MacKay, Her Majesty's piper, seems to be in much the same way.

The collections of Ross, Glen and MacPhee, published still later, contain a few tunes which I have not yet seen elsewhere and therefore, when correct, I have not considered these available for the "Ceol Mor" collection. Otherwise these more modern collections appear to be re-publications of what were given to the world by MacDonald and by MacKay.

Since I was taught my first piobaireachd now more than 40 years ago, by Alexander (better known amongst pipers as "Sandy") Cameron, brother of Donald Cameron—who, as a performer, was the MacCruimein of his day—I have never let slip an opportunity either of noting down a new, or correcting, if on good authority, an already acquired piobaireachd. It has been the hobby of my life, in following which I have acquired a habit of noting down from the playing of another without difficulty, a gift which every piper should strive to acquire. I cannot reconcile myself to the idea of so much lore as I have collected being lost to the world, when, from all that I can learn from pipers whom I meet, piobaireachd playing at public competitions is languishing from want of published material.

The competition in quicksteps, reels, strathspeys, &c., is as brisk as ever, if not brisker; but even the slow Highland airs, many of which sound very beautiful on the pipes, and no doubt were pipe tunes originally, are now never played in public, the impression apparently being that the bagpipe is adapted only to the display of the most brilliant execution, as exemplified in rapid fingering which, to the uninitiated, must often appear all but impossible. What would an accomplished musician think if I were to invite him to attend a public competition of all our regimental bands, and he were to find our own Engineer, Artillery and other noted bands expending their chief energies on "the British Grenadiers," "Sir Roger de Coverley," &c., and relegating to the back ground the classical music of the day, to which English audiences are now being so well educated? The result of the growing neglect of our own classical pipe music is only what might have been expected.

In making these remarks I hope I shall not be thought to speak disparagingly of quicksteps, and our lighter pipe music which no one enjoys, (in its proper place,) more than I do. This lighter music is far too prominent a feature in the regimental economy of our Highland regiments to be slightingly treated. It has served us many a good turn in our campaigns of the past and will, I trust, do so in many a future one; but it is not the music, which does full justice to the Highlander's national instrument, and should not occupy the foremost rank in a Scotchman's estimation, as, I fear, it is fast doing.

Oban is far enough from my own old home in Strathspey, but it being the centre of a piobaireachd-appreciating community much given to the discussion of historical questions closely connected with many of our old piobaireachdan, I take ineven at the risk of being taken for a Home Ruler—the Oban Times. This is a letter headed "Piobaireachd" and addressed to the Editor, who, with all his Home Rule failings, I take to be a good Hielandman in other respects:—

"PIOBAIREACHD."

"Edinburgh, 8th August 1893."

"SIR,—Can you, or any of the numerous readers of the Oban Times, inform me how it is that "Piobaireachd" is the only "species of the music of the Gacl that has neither time, tune, melody, or rhythm in it? Did the composers intend to puzzle and "annoy, or is it the performers who vie with each other in prolonging unconnected, meaningless sounds? I have recently listened "to a champion playing, what he called, the "Massacre of Gloncoe," but really no one could make head or tail of it, and am at a "loss to understand how an intelligent being could call it a musical performance.—I am, &c. Celt."

As I read this out here, in the Oban Times of all papers, my first thought is: -- Is "Celt" still alive? I have no idea as to his identity, but his feelings would probably be hurt if I did not assume him to be twice as Celtic by birth as I am, so that I concede. This kind of criticism is not altogether new, but what does it prove! As against the class of music, in all essentials, to its votaries, absolutely nothing. The main object of music being to give pleasure, the fact is incontestable that the strains of a piobaireachd exercise an influence certainly not surpassed by that of Jenny Lind's sweetest warble on her audience at the Italian Opera. The real gifts of the champion piper, to whom "Celt" was listening, need not be any the less real for being beyond Celt's powers of appreciation; and as for the particular piobaireachd, "The Massacre of Glencoe" here selected for criticism, "Celt" would probably never recognise it if he heard it again. The whole letter proves only one thing, which is, that whatever the writer may be by birth, he is but half a Celt after all. From want of the necessary education and early association he has been deprived of half his birthright; the exquisite pleasure of listening to strains recalling long bygone scenes of reality and of fancy, with which the whole happiness of my life seems interwoven. I pity "Celt" from the bottom of my heart, and would myself have rather been born with one ear atrophied than be in such a plight. Nor does "Celt" stand alone amongst his countrymen in this respect. If a man hears nothing but quicksteps and that class of music from his childhood he stands no better chance of appreciating a piobaireachd,—or, for the matter of that, of appreciating any of the most exquisite classical music of the day, than does the hill coolie passing under my window giving full voice to one of his native hill airs, and who, for all that I know to the contrary, may be a very Mario amongst his brethren.

It is with very different feelings that I face the honest criticism of a friend, whom as yet I have never seen, but to whom I am indebted for much kindly assistance for some of the "Ceol Mor" collection, and to whom I hope to be indebted for still more when we meet. He is as fond of a piobaireachd as I am, and when answering my first letter on the subject of "Ceol Mor" writes:—"I can gather from your list" (given in the same form, though then not so extensive as that given herewith) "that "there is one terrible error that you are about to perpetuate—the time of the ground. Unhappily no pipers hitherto appear to "have had sufficient musical knowledge to notice that the ground of a piobaireachd has no rhythm known to European music.

"It has a proce rhythm—a recitational rhythm—which cannot be expressed by any "time" mark. I am corroborated in this by the highest musical authorities, to whom I have played. If you can find a really scientific musician, play over to him the ground of the tune, "You're drunk and had better sleep," and ask him to write it down. He will tell you that it is impossible to write it so that a musician would know how to play it. I say again that I speak upon the highest musical "authority in the world. You might as well attempt to give the scansion of a passage in Demosthenes or Cicero as of the ground of a piobaireachd. It is high time that the Piobaireachd should be dealt with scientifically, as it well deserves."

The opinion above so well expressed by my friend is, I know, one shared by many. I confess to having once held it myself and, believing in its soundness, my original intention was to have confined "Ceol Mor" strictly to piobaireachdan not hitherto published, and to give to the world these tunes exactly as I had them noted. To the editing of this book I had been looking forward for many a year when my official duties quite prohibited my undertaking such a task. On my retirement from active service five years ago I set to work without delay, and I cannot answer the above criticism better than by here giving an account of my labours during these five years, resulting, as they have, in a complete modification of my views. It seemed to me that one great drawback to the study of piobaireachdan and which was mainly answerable for its consequent neglect, was the excessively inconvenient form in which they have hitherto been presented to the public. A book 13 inches x 10 inches, the size hitherto adopted for this book, cannot be considered handy in any sense. Again a piobaircachd, from start to finish, is generally a long piece of music. The performer must play it by heart, and to learn it by heart, from score written as hitherto. is no small tax even on a good memory, for the construction of a piobaireachd thus written remains perfectly hidden. It is very similar to learning by heart a long piece of poetry written as prose. In the case of the poetry, the difficulty of the task would only be partially alleviated by a couple of sloping dashes marking the end of each line; and so it is with the piobaireachd, where this plan has been adopted since Angus MacKay started it. I very soon came to the conclusion that the piobaireachd was the music of poetry and not of prose, and that as poetry it must be written if ordinary mortals were to be set the task of learning it by heart.

Without inconvenient crowding it would be impossible to write some lines of piobaireachd in full without exceeding the limits of a handy sized book, and here abbreviated notation became imperative. I have devoted my attention to this subject ever since 1853. I was then a beginner and, noticing how such music seemed to be adapted to abbreviation, I could not help suggesting some obvious abbreviations to those who were very kindly making a manuscript collection for me. It very soon however became evident that such a notation, to be worth anything, must be systematically worked out with a much deeper knowledge of the subject than I then possessed.

From 1869 to 1871 I left India on furlough, my home then being at Laggan on the Elchies estate, in Strathspey. Donald

MacKay, now piper to H. R. H. the Prince of Wales, was then piper to Sir George Grant of Ballendalloch, 8 miles from my home, and thanks to Sir George's kindness, most of Donald MacKay's days off duty, when his master was at Ballendalloch, were spent with me at Laggan. Whatever I have of piping capacity I owe to D. MacKay, whose stock of piobaireachdan as a pupil of Donald Cameron, not to mention the Ballendalloch collection, seemed inexhaustible. To book as much of this as I felt capable of mastering was my very congenial task during these two years and to accomplish it I had to take in hand an abbreviated system of notation which appeared to be essential not only to the correct writing down of this class of music, but also to the correct booking of much of the music played to me by D. MacKay (such as "The end of the Great Bridge") in Donald Cameron's style, so different from what I found, say, in D. MacDonald's first volume. Since I first began this abbreviated notation most of the ciphers have been changed many times over, and this has entailed an amount of writing and re-writing as successive improvements and classifications suggested themselves and had to be adopted throughout—which could hardly be conceived by those who have had no evidence of it. I do not say that the abbreviations which I have finally adopted throughout "Ceol Mor" are not capable of improvement: I hope that they will be improved by those who come after me, but they have fully answered the purpose for which they were intended, and if my friendly critic will allow me to say so, I think I could undertake now, by the aid even of my first imperfect ciphers, to render the piobaireachd to which he refers, "You're drunk and had better sleep," exactly as I got it from D. MacKay 23 years ago, and I hope that others also will do so hereafter, for the piobaireachd is a good one.

One of the greatest advantages of the new notation I found to be the easy juxtaposition—very often in the same page—of the corresponding bars of the ground and the several variations, and this threw a new and most unexpected light on the whole subject, for it enabled me not only often to distinguish between a right and a wrong bar, but also to decide between the diverse renderings of conflicting authorities.

As an instance of this I may quote the case of "MacIntosh's Lament." I learned this from Sandy Cameron in 1852-53, and he had been taught by his brother Donald Cameron, the best piper of his time. I have a list of D. MacKay's piobaireachdan with full particulars as the sources from whence he derived his versions, and from this list I see that D. MacKay learned "MacIntosh's Lament" direct from Donald Cameron. When I played over the tune to D. MacKay in 1870 he pointed out to me that I was playing it wrong, as my ground did not agree with the variation. As it was then 17 or 18 years since I had learned the tune from Sandy Cameron, and as in the meantime I had heard many pipers playing it—no two alike—I thought it more than likely that the going astray was mine, and so I very carefully took down D. MacKay's set and have played it ever since. A few months ago I had this tune played to me by Keith Cameron, Corporal Piper in the 2nd H. L. I. Keith Cameron is old Donald Cameron's son, was taught by his uncle Sandy and plays it just as I did when D. MacKay corrected me! In "Ceol Mor" I am giving both sets, which not only differ from each other but from the set given by Angus MacKay, who taught

Donald Cameron; and yet in the variations all three versions agree. It is fortunate that they do agree with each other so far, as we thus have some clue as to the really correct setting.

It is in this way—by comparing ground and variations together—that many of the tunes of "Ceol Mor" have been corrected with tolerable certainty, and MacDonald's second volume, now coming to light for the first time, has been of such assistance, that I often feel that, as a matter of fact, very little of these corrections are the work of my own fancy but are all more or less based on some good authority. To explain what has been the manipulation of every corrected piobaireachd would enlarge "Ceol Mor" to such an extent as to make its cost prohibitive and thus defeat the main object that I have in view. The critical notes which I am publishing with "Ceol Mor," are not given to the public with any idea of their intrinsic merit, but rather for the purpose of illustrating the principles which have guided me in the task of editing, and to convince those interested that the corrections are not the result of mere caprice on my part. The whole of "Ceol Mor" has already been gone over by me most carefully with Sergeant Piper A. Paterson; and Corporal Piper Keith Cameron, if he has not gone over them all, has certainly done so to those within his ken. With a view to having the most authoritative revision possible I have had tracings made of the whole of the first volume to send home to D. MacKay, in order that he may get them revised by the best authorities known to him, foremost amongst whom will certainly be Colin Cameron, late piper to the Duke of Fife, so that the book will be fairly representative of the school of Donald Cameron, in which I was educated. Through Angus MacKay—it will be

I hope it will be acknowledged that I have spared no pains to work on the best authorities attainable, and it is to satisfy pipers on this point that I am issuing a list of the tunes in the coming book, together with the fullest particulars as to my sources of information. They must take my word for it that, as Editor, I have corrected as little as possible and then only in the interest of correct time and metre.

seen from his historical notice of hereditary pipers, which I also hope to reproduce, if not rendering "Ceol Mor" too bulky-

Donald Cameron may fairly be considered the modern representative of the MacCruimein school.

From what I have already said regarding the variations that have occurred in the settings of "MacIntosh's Lament" since it was published by Angus MacKay a telling lesson may be learned. If my critical notes on the "Massage of Glencoe" be studied, it will be seen how much greater has been the divergence in the rendering of this piobaireachd in the longer interval since D. MacDonald took it down. To go further back still this divergence is even more apparent in "Lochiel's Salute," which MacDonald knows by the name of "Away to your tribe Ewen." The divergences go on increasing so markedly with the antiquity that I am, as a rule when correcting, driven to depend on internal evidence rather than on living authorities, and with the experience acquired by long study, I really often feel myself in a position similar to that of the late Professor Owen reconstructing his extinct saurian from the single fossil bone which is all that he sometimes had to guide him.

The progress of my labours with my manuscript, hitherto unpublished tunes, to which "Ceol Mor" was originally confined, so encouraged me and seemed to reveal so many unsuspected beauties, that I could not resist the temptation of extending my researches to the published tunes of MacDonald and MacKay. The conclusion at which I could not help arriving was, that both had given to the public a mine of wealth, the value of which had hitherto been entirely concealed by errors as to time and metre. As an instance, I would ask could there be a more beautiful air than the "Sister's Lament"! And yet I had never heard any piper play it. I had myself tried it over many a time without being able to make anything of it; but suddenly its correct metre and time seemed to flash on me, and through a long illness (typhoid fever), which immediately followed that discovery two years ago, that beautiful piobaireachd never left me.

I have now worked through every piobaireachd that I can get hold of. Where I have found errors of time and metre (regarding which there can be no mistake) I have unhesitatingly adopted them for "Ceol Mor," whoever may have been the publisher. Those which I could only get from the single published version and found correct—excepting the works of MacDonald and MacKay, the personal interests in which are extinct—I have not included in my collection.

I have not now the shadow of a doubt as to every piobaireachd being the music of a poem. I do not profess to be an authoritative musician, such as those quoted against me by my friendly critic in favour of the "recitational" theory, and I am sure that if they had really studied the subject as long and as exclusively as I have—which is not likely—they would be as convinced as I am that the true origin of the "recitational" theory is to be found chiefly in errors of the notators as to time and metre, and to errors of omission and commission. It would be a marvel if these did not abound, considering the limited extent of musical education which alone could have been brought to bear on them. We see the traceable divergencies to which I have alluded as occurring in comparatively short spaces of time even with music noted, and it is to me only a matter of marvel that this music—much of it coming down to us through many centuries, during which it was throughout the sport of tradition and, for half a century, proscribed—should now be ever recognisable. It is rather to my mind a greater marvel that its poetic origin should have survived at all and still be so clearly traceable. That it is so traceable I consider conclusively proved from the facts regarding metre which I must now consider established, and I think it will be acknowledged that, given metre, time cannot well be conventional or arbitrary.

I do not think that anything has been of greater help to me than the establishment of this fact of metre. I define the metre by the number of bars in each line thus:—6, 6, 4 means that the measure—of the ground, in defining generally for a pio-baircachd—is one of three lines having 6 bars in the first line, 6 in the second and 4 in the third. A colon after a figure denotes that the line to which it refers is played twice, thus 6:, 6, 4 means that the first line of 6 bars is repeated.

I have analysed 173 piobaireachdan and find that they consist of :-

5 1	lined	airs	***	***	3
4 3 2	11	17	•••	***	56
	11	11	***	•••	112
	11	11	***	***	2
				Total	173

Reducing the figures representing the metres to their lowest denominations by dividing them by their greatest common measures, we should get the three metres 15, 15, 10—9, 9, 6 and 6, 6, 4 all represented by 3, 3, 2; and out of the 173 metres I find that 54 are in the 3, 3, 2 proportion, 50 have the same number of bars in all the lines, and the remainder all have harmonious proportions. I have not met a single instance of 13, 11 or 7 (which I consider out of harmony) bars in a line which did not point to an obvious error of omission or commission as to a bar: an error, generally without much difficulty, made good, when once detected, by a reference either to context in the same measure, or else to the corresponding part of another measure. Out of the 173 there are only 3 which have 5 bars in a line, and these are all Laments, having the 5 bar line as the last of the measure and ending with an Eallach, which might well be expressive of "Ochone!" To my mind this effectually establishes the fact of the basis of a piobaireachd being poetry and not prose. I do not see how the "recitational" theory can possibly hold good with method and metre so obvious in every line. Moreover the whole language of the Gael is acknowledged to be essentially poetic, and, such being the case, it would be anomalous indeed if his music were that of prose.

Now as to the time of the piobaireachd, which my friend thinks it impossible to express as in ordinary modern music. I fully acknowledge that in many respects the music of the "piob ghaelach" does not follow the rules of ordinary modern music. For one thing the scale of the pipes is different to the diatonic scale obtaining in the latter. On the pipe chanter the scale approaches most nearly to the key of A major, which has three sharps C, F and G, with this difference in its intervals:—The low G and its octave being the flat seventh, but rather sharper than G natural. The C is not a full semitone sharp and D is slightly sharp. I have often tried, but never succeeded in finding such a scale in India. I do not, however, see that, for Ceol Mor, ordinary music rules may not be made applicable as to time. The chief peculiarity in pipe music appears to me to lie in the way in which grace notes and pauses are used therein, and according to the rules of ordinary music these are both, as it were, outside the specified time, which applies to the full notes. The difficulty alluded to by my friend has, I think, arisen from the want of proper application hitherto of grace notes and full notes, an error which I have endeavoured to avoid in "Ceol Mor." For instance,

let us take the grace note cadences on Plate I. The emphasis that the piper lays on the E, is, as far as I know, quite unlike anything of the kind in ordinary music, and, as will be seen from para 5 descriptive of the notation, this E is often still further specially emphasized, so as almost, but not quite, to obliterate the following D in the G E D cadence. If this peculiarity of pipe music be not recognised and the E be treated as a full note the time of many a bar will be thrown out. I would also draw attention to what I have written regarding the grace note triplets of the "Breabach" as another case in point. A very fruitful source of confusion as to "time" hitherto appears to me to be in the proper distinction of the first true full note of a bar; for instance, in the "Old Woman's Lullaby" the foot naturally comes down to the C as the first full note of the first bar, whereas Ross makes the first note to be A, which in reality is only a grace note leading to C.

It would be easy for me to write a volume on such a subject as this, but my Introduction—which must do duty for the description of the new notation with a few Example Piobaireachdan from the Ceol Mor collection, as well as for "Ceol Mor" itself, of which the description is only a precursor—is too long already. The chief object of this introduction is to admit the piping fraternity frankly behind the scenes, so that they may satisfy themselves as to the genuineness of my endeavours to restore, as far as possible, the good work of others, and that I have not been guilty of attempting to palm off, as ancient music, pure fabrications of my own. Unfortunately MacDonald's and MacKay's publications, long out of print, are now within reach of few, but copies are not so rare yet that they may not be forthcoming to check my work. I daresay some may think that, if I intended to publish at all, it would have been better to restrict myself to publishing MacDonald's 2nd volume as I received it. I have two reasons for not doing so. First, the expense would have been more than I could afford; and second, I very much fear that such a publication, quite as full of errors as MacDonald's first volume, would have been equally neglected.

I honestly think that it is only due to the technical errors so obviously permeating most of our published piobaireachd music as to make much of it all but unintelligible, that piobaireachd playing is now in such a languishing condition. It is not for me to say so, but when I compare my own feelings when playing, from corrected Ceol Mor, with what I used to experience, when playing, with uncertainty at every turn, from the old music, I cannot but feel hopeful as to making converts to my system.

It has been the dream of my life to bring out this book, and many have been my anxieties that my days might be numbered before my task could be accomplished. Were I at home now I daresay I could secure many coadjutors, whereas here in India wind and tide are against me altogether, and I am only thankful that I have got so far as to be in a position to get my pilot pamphlet in presentable shape. Here music publishers are not within hail of me altogether, and even if they were, pipe music would be a mystery to them, not to mention the alarming ciphers of Ceol Mor notation. My only chance of avoiding the many inaccuracies incidental to copying in any form lay in being my own draughtsman and trusting to survey officers for the printing of my headings and placing within my reach the appliances of photozincography. For the last I am indebted to my friend

Colonel G. Strahan, R.E., Deputy Surveyor General, without whose aid I should have been helpless. I can never thank him sufficiently for his extraordinary patience over a job, which, to his mind, must appear an unfathomable mystery.

The critical and historical notes I must reserve for "Ceol Mor" itself, the time of appearance of which must depend a good deal upon the reception accorded to my pioneer pamphlet. The list of tunes which I have collected for the complete book will give to my friends an idea of the material which I have available, and if any of them can kindly add to my stock of piobai-reachdan I shall be only too thankful, and this description of the abbreviated notation will enable them to do so with the minimum of labour.

It only remains for me now to thank the many friends who have so kindly assisted me in this work. To Sir George Grant of Ballendalloch I have already expressed my obligations. Mr. E. Dove, Barrister-at-Law of Lincoln's Inn, who, I suspect has a larger collection of piobaireachdan than I have, could not have been more generous with his treasures than he has been, and in anticipation I must thank him for promised favors of a similar nature to come when we foregather at home. Mr. Lockhart Bogle's picture of "The Pibroch" in the R. A. exhibition of 1890 proclaims him a piper, and I have to thank him for allowing me to use it as a very appropriate embellishment to "Ceol Mor" when published.

My piper friends have never failed me, and the interest that they have shown in "Ceol Mor" has been a great encouragement of me. Let me here name them, for the list is as good a guarantee as I could wish for of the genuineness of the work. They are:—

Donald MacKay, Piper to H. R. H. the Prince of Wales, Colin Cameron, late Piper to the Duke of Fife. Sergeant Piper A. Paterson, 2nd H. L. I. Corporal Piper K. Cameron, 2nd H. L. I. D. Fraser, late Sergeant Piper, Seaforth Highlanders,

To one and all I tender my best thanks and, if last not least, to Colonel Leigh and the Officers of the 2nd H. L. I. for the substantial aid they gave me in rendering available to me, as far as they could, the services of two such never-wearying and capable assistants as the abovenamed two members of their regiment.

East Laggan, Naini Tal,
East Indies, September 16th, 1893.

C. S. THOMASON.

Ceol Mor Notation.

GRACE NOTES.

- 1. The construction of the Highland bagpipe does not admit of consecutive full notes being played strictly "staccato",—to use a term of ordinary modern music,—in contradistinction to being "slurred"; but the corresponding result is arrived at by "cuts" or "strikes" on the full notes, by means of one, or a combination of two or more grace notes of very small time value, immediately preceding them. Taking the case of such single grace notes, it is convenient to distinguish a "cut" as one in which the grace note is higher than the full note, and a "strike" as one where the grace note is lower than the full note. Where a combination of grace notes precedes the full notes, it will be a "cut" or a "strike" according to the last note of the combination being higher or lower than the full note. For instance we may allude to a "cut" from D on B, where a grace note D precedes a full note B; but it becomes a "strike from low G on B", where a grace note low G precedes a full note B.
- 2. Even in the matter of single cutting or striking grace notes, there is considerable scope for abbreviation, as will be seen from the first example of grace notes given in the key. In pipe music there are no crotchet or quaver grace notes. Except in the cadences (Plate I), in the Doubling Echoes (Plate II), the echoing beats (Plate III) and the shake on D (Plate IV), all the grace notes are demi-semi-quavers. If then we write demi-semi-quavers grace notes as crotchets, as in the first example of grace notes given, there need be no confusion, and the saving in labour and space at once becomes evident.
- 3. "Couplet" grace notes (Dithis) are easily dealt with by placing the first of the two on the left of a stem and the second on the right of it, as in the second example.

- 4. If the couplet is a cadence (Tuiteam), as in the first example of cadences, the value of a longer pause on the second note, is given by making the second note of medium size, intermediate between a grace note and a full note.
- 5. For the three other grace note cadences, which each have three notes, special easily remembered ciphers are given, the first of which occurs very seldom. The last example but one shows the commonest cadence, the prolongation of the centre E being carried still further, if necessary, by a dot over the cipher, in which case the D following is almost imperceptible. It frequently happens that this cadence occurs at the beginning of a variation, being converted into a simple high G grace note the second time of playing. A short horizontal dash over the cipher shows this peculiarity.
- 6. A "Repeat" (Aithris) is a combination of three grace notes, the first and last of the three being identical, and, as the primary note, giving name to the repeat. The centre note is a "cutting" one, where, as in the first example, it is the highest; or a "striking" one, where, as in the last example, it is lowest one of the three. The first example is of a low G repeat cut from F, and the last is a high G repeat struck from E. The naming note is made medium size and the striking note grace note size, a thin line extending from the former nearly, but not quite, to the latter.
- 7. A "Warble" (Ceileirich) is composed of a repeat with a grace note preceding or following it. A dot represents the naming note of the repeat and a stem extending from this dot terminates at the position of the repeat's striking note. A curved line commencing with the thickness of the fourth note and gradually thinning, ends at the stem, and lies to left or right of it according to whether this fourth note precedes or follows the repeat. There is no danger of confusing this cipher with a grace note quaver, because, as already remarked, there are no grace note quavers in pipe music.
- 8. An "Echoing warble" (Ceileirich fuaimneach) is a repeat preceded and followed by the echoing note, and its cipher differs from that of the warble in having similar marks on both sides of the stem.
- 9. A "Trill" (Crith-cheol) may be a repeat preceded or followed by two notes, or an echoing warble preceded or followed by one or two notes. Probably the six example ciphers given, each showing the first and last notes of the trill, will meet all requirements.
 - 10. "Triplets" (Trivairean) form a very useful combination of grace notes, as they often save "syncopation" of full notes

which is a snare to many pipers. The cutting notes on the triplet notes are always the same and therefore need not enter into the cipher, which is much simplified accordingly. For grace note triplets, the characteristic attachment to the upward stem is made immediately above the staves instead of to a downward stem immediately below the staves, as for full note triplets to be noted hereafter, vide third line Plate I, first line Plate IV and paras. 27, 28 and 29.

- 11. The cipher for a grace note "Turluath" is taken from that for the simplest form of the Turluath full note beat, one of the most important beats in pipe music; but, like that of the triplet in the immediately preceding para., its distinguishing cipher, a T, is placed immediately above the stave instead of immediately below, as in the case of the full note beat to be considered presently, vide third line Plate I and para. 32.
- 12. The last three examples of "above stave ciphers" of grace notes are what are necessary to meet certain exigencies of some full note beats, a subject which we are now in a position to consider.

FULL NOTE BEATS.

- 13. The full note beats may be classified as follows:--
 - I. The Echo (Fuzim).
 - II. Doubling Echoes (Fuaimeach dubailte).
 - III. Echoing beate (Buillean fuaimneach), including the Gairm or call and the Eallach (or burden).
 - IV. Shakes (Crathadh).
 - V. Couplets (Dithis).
 - VI. Triplets, three note beats and "Breabach" (tramping).
 - VII. The "Leumluath beat".
 - VIII. The " Turluath beat".
 - IX. The "Crunluath beat".

The "Thumb" or "A" and the "Swing" (Seog) variation have no particular ciphers and therefore need not enter into the above category.

- 4 14. Speaking generally, the first four of the above may be said to pertain more particularly to the Ground (*Urlar*) or Theme of a piobaireachd, whereas in the last five, each best pervades, as it were, a characteristic variation of its own, so that we may conveniently designate them as "variation beats" and deal with them separately. It will be observed that in all the ciphers for these beats, the intention is to convey therein an idea of the time value or duration of the whole beat, and not of each of its constituent notes.
- 15. A scale of "Echoes" (Fuaim), extending from F to low A, is shown on the first two lines of Plate II, each beat consisting of the primary note at the beginning and end of the beat, the two being separated by a repeat. All but the last four examples represent the regular beat with the regular repeats pertaining to them, which therefore do not require to be noted on the stem. An irregular echo (always below F) varies as to the repeats, but as the repeats are all cut from F (vide para. 6) it is only necessary on the stem to mark with a small dot, the naming note of the repeat, vide para. 6. The cipher for an even echo is an inverted pause cipher (without a centre dot), a dot being placed at the beginning or end of the curved line forming the cipher, to show, in an uneven echo, which is the long note.
- 16. An echo most commonly occurs of the value of a crotchet (1), but it may be reduced to that of a quaver (1)—vide two examples given—either by converting the stem from that of a crotchet to that of a quaver, or by putting under the crotchet stem a short horizontal dash, which always halves the time value of any beat and is often convenient for saving complicated quaver markings on the stem.
- 17. A scale extending from low A to high A is also given of "doubling Echoes" (Fuaimeach dubailte) of $\frac{3}{4}$, $\frac{3}{4}$, and $\frac{1}{4}$ values for each beat. The cipher only differs from the ordinary notation of notes of these values in that the stem is a curved instead of a straight one.
- 18. "Echoing beats" (Buillean fusimmeach) extend according to scale from D down to low A. E is a prominent note in all these beats and, combined with the primary note on one stem, gives the cipher the appearance of the expression in ordinary music notation, of E and the primary note being struck together. As however, on the pipe chanter, two notes cannot be struck together, this semblance need cause no confusion in reading the cipher. The relative values of E and the primary note, as shown on the

cipher, are more or less conventional, the object being rather to convey the time value of the whole beat, which is not likely to be acquired correctly—whatever the notation may be—without the aid of a master.

- 19. The echoing beat on the low A has two distinct expressions which may be distinguished as the Gairm or "Call" and the Kallach or "burden". It is too much the custom to scramble this beat and always to render it as an Eallach, but the distinctness of the two expressions is well i'lustrated in Cholle mo runs or "The Piper's warning to his master". The first line begins with the piper's call, or Gairm, to his master, Cholle mo runn; and ends with the Eallach or "burden" of the air, his warning—tha mise's laimh—"I am a prisoner". To bring out this best properly requires "the strong little finger" of the low hand on the chanter, the piper's pride: but it may be some consolation to those who, like the author, have had the misfortune to cripple this important finger, to know that the beat can be rendered equally well with the help of a key worked by the little finger of the upper hand.
- 20. It will be observed that there are two echoing beats for D. In the first, the second note is struck from low G, or is, in piper's phraseology, "closed": in the second, this note is struck from C, and is known as "open". The former is that adopted by Angus Mackay, and the latter by D. MacDonald and most pipers of the present day.
- 21. The "shakes" (Crathadh) pertaining to this beat on D will be found in full at the beginning of the first line of Plate IV, but it should be noted that there are two shakes, each with a different cipher to each note.
 - 22. The remaining "variation beats" will perhaps be better understood if treated in connection with:-

THE PIOBAIREACHD.

- 23. A Piobaireachd (Anglice "Pibroch") may be defined as a piece of classical music, as played on the Highland bagpipe, consisting of two or more measures. These measures, for the most part, admit of classification according to characteristics peculiar to each measure, and the order in which they usually occur is as follows:—
 - 24. The Ground or Urlar (denoted by capital C), which corresponds to the Thema or Theme of ordinary modern music.

- 25. The Thumb or A variation, (denoted by capital A) so called from its divergence from the ground by the occasional substitution of the high A (which is formed by raising the thumb of the upper hand on the chanter), for one or more notes of the Ground. This variation in the score is shown simply by an A (musically expressed) superposed above the note or notes of Ground, which it supersedes.
- 26. The "Dithis" or "Couplet" variation (denoted by capital D), consisting of couplets of notes shown on one stem, one on left and the other on right of the stem which terminates on the lowest line of the staves. If the two notes are of equal duration they are made of equal full size, and this is shown still more clearly by two moderately sized dots placed just below the stave, one on each side of the line of the stem. If one note is of longer duration than the other it alone is made of full size and its underlying single dot is superseded by two similar dots placed vertically one over the other. The note of shorter duration is made of a medium size, intermediate between a full note and a grace note, and its corresponding single dot, under staves, is replaced by a thick vertical dash. The dots and dash occupy vertically a space equal to that between two lines of the stave. The grace note, or notes, preceding the second note of the couplet are shown in the line of the stem, and if the line of the stem interferes with this, they are shown by special ciphers, placed above the staves and in the line of the stem.
- 27. The "Breabach" or "stamping" variation (denoted by a capital B) is characterised by triplets (full or grace note) in most of the beats, exclusive of cadences: but, in connection with the Breabach, the term "triplet" is used simply for convenience, as the three note beats are not necessarily triplets proper, which in ordinary music phraseology would imply that their time is different to the rest of the bar.
- 28. Bearing in mind this reservation in using the term "triplet" as applicable to this part of a Breabach beat, the different pointing, which it is possible to give to these triplets, as given in the first line of Plate IV, should be studied.
- 29. According to the author's experience, the pointing of the Breabach given in the various examples hitherto published, and in manuscript, is very seldom that adopted by pipers in practice. To express the triplet in grace note form (vide para. 10) often gives more correct expression, and avoiding all appearance of syncopation, is not only more correctly but more easily rendered. The pointing of these triplets really affords greater scope for taste than for dogmatising.

- 80. The Seog or "Swing" variation, denoted by capital S, for which there is no cipher. It is in § time and, as occurring in the "Desperate Battle Perth", is expressive of the swing of the claymores.
- 31. The Leumlusth (from Leum to leap) variation is denoted by the capital L, which also figures at the bottom of the stem. The Leumlusth beat is a peculiar one, conveying the impression of a leaping or springing motion, and, with the exception of that for the note D, its form is the same as regards all but the initial note for every note in the scale. The high G beat starts with a high A grace note and the high A beat has no starting grace note; the beats for all the other notes start with a high G grace note. Otherwise, excepting a slight variation in the grace notes preceding the second note for the D, there is a marked uniformity throughout the scale for this beat. The Leumlusth scale is therefore a very simple one. The beat has three full notes, the value of the first being a quaver and a half, of the second a semi-quaver, and of the third a quaver. In this respect the beat very rarely indeed varies from the given scale, but, when it does, the corresponding changes in the cipher follow the rules to be detailed when treating of the Turlusth beat.
- 32 The Turluath variation differs from the Leumluath in the bent which pervades and characterises the measure. It is denoted by the capital Tapplied in the same way as the L of the Leumluath. There is a regular Turluath beat scale, given on Plate IV, for a † Turluath beat, as the most common and the basis of all others; but the variety of Turluath beats is almost endless, admitting of expression only by adherence to strict rules as to the cipher formation, and the construction of the Turluath cipher to meet these requirements will be next considered.
- 33. It should however be noted that there is a recognised departure from the ordinary form in what is known as the Turbuth a mach bests on B, C, and D, which are given on Plate IV and are recognised in cipher by the T being reversed and becoming 1.
 - 34. Analysing the Turluath beats given on Plates IV and VI we find that they consist of :-
 - (i). A starting grace note for all the notes except high A. This is for every note as laid down in the scale, whatever form the beat may take. It may therefore be assumed always as according to scale and may be omitted in the cipher.

- 8
- The exceptions are very rare indeed, but should it occur, as in a B Turluath beat in "Lord Reay's Lament", where a high A takes the place of high G, the departure from rule is accentuated by a small St. Andrew's cross preceding the high A, as shown in the first line of Plate VI, fifth example, first line.
- (ii). The primary note of the best written full size and on the left of the stem. The quaver, semi-quaver or demi-semi-quaver markings of the primary note are also given on the left of the stem.
- (iii). The grace note or notes immediately preceding the second full note.
- (iv). The second full note of the beat as well as its quaver markings is given on the right of the stem, and of a medium size, intermediate between a full note and a grace note. The grace note or notes preceding the second note may be given on the stem, (vide example of Crunkath, the third on line 4 of Plate VI)—or above the stem and in the same line—or above the staves in line of the stem and in the forms given as "above stave ciphers" at end of last line Plate I.
- (v). The grace note preceding the last note, almost invariably E. Deviations from this rule are accentuated as for initial grace notes, (vide Plate VI, sixth example, first line, and (i) of this para.)
- (vi). The final note of the beat. This varies, and being shown the size of a grace note, is connected with the stem by means of a fine fancifully curved line. The quaver markings are given after the cipher T at the bottom of the stem by one horizontal dash for a semi-quaver, and two dashes for a demi-semi-quaver.
- 35. If the stem and cipher is bare of quaver marks the time values of each of the notes may be assumed as that given in the scale Plate IV. If the stem only is bare the time values of the first and second notes may be similarly assumed.
- 36. It only remains to consider the dots in connection with these notes. The examples given on Plate IV all have a dot to the first note, but for brevity's sake this is not shown, though its proper place would be before the first note, there being no room for it elsewhere. If it is sought to do away with this dot it is only necessary to omit it and still to give quaver markings on the stem, as in the examples of a \frac{1}{4} and \frac{1}{4} Turlualh (vide first line Plate IV). If necessary, a dot may be put to the second note

after it on the cipher, as in the Crunluath example given, 5 from end of line 3 Plate VI. Should the third note be dotted the dot is given after the T cipher at bottom of stem, and above a horizontal dush should the last note be a semi-quaver.

- 37. The Crunluath beat, which has a C as its cipher and at the bottom of the cipher stem, differs from the Turluath in two respects. Firstly the & Crunluath, (the most common one and for that reason taken as a basis) has no dot, therefore a dot preceding the cipher must always be given or omitted according to whether it is required or not. Secondly, whereas the Turluath ends with a cut, the Crunluath ends with an echo. The echo is always an E echo, and the high note of the repeat of the echo is always an F. So much may therefore be assumed and need not be noted in the cipher, and to identify the notes of the echo it is only necessary to give the naming note (vide para. 6) of the repeat of the grace note size and, as in the Turluath, to connect it with the stem by means of a fine faucifully curved line. It may sometimes appear, as in the example given in centre of lines 3 and 4, Plate VI, that the second note of a Crualuath is wanting, but in reality it is not so, but is simply a prolongation of the first note without a grace note intervening as shown—a common occurrence in ordinary, though not in pipe music.
- 38. If this small note is the same for the Turluath and its doubling, or for the Turluath and the Crunluath, the second is said to "follow" the first. If the small third note is identical with the second note of the cipher, the beat is said to be Fosgailte or played "open" (from fosgail—open), in contradistinction to "closed" when this note is a low A or G.
- 39. The first note of a Turluath or of a Crunluath is generally longer than the second, but where it is shorter and the beat is played "open" we get the "Turluath a Mach" and the "Crunluath a Mach", usually found in treblings, but also sometimes in doublings. If, however, the pointing of the beat remains unchanged from the ordinary beat, and the difference consists only in playing "open" instead of "closed", this is a true "Fosgailte" beat: and if, as a cipher, F be substituted for the Turluath T, or the Crunluath C at the bottom of the stem, it means that the beat—Turluath or Crunluath as the case may be—is to be played "fosgailte". For instance, the second cipher on line 4 of Plate VI might be more simply given with a D (note) at top of stem and an F (letter) at the bottom.
- 40. In timing the notes of the echo of the Cruniuath it may—(except in Cruniuath Brenbach to be presently noticed)—be assumed that the second note of the echo is longer than the first: and if the time value of the second note be given after the C

- by horizontal dashes and dots, as after the T in the case of the Turluath—the time value of the first note of the echo, which is all that remains undefined in the best, is easily arrived at. This may at first sight appear a complicated arrangement, but it is not easy to devise a remedy. In practise no difficulty is experienced, and the table of Crusluath Echoes given in Plate V makes easy the management of the Crusluath beat.
 - 41. The cipher for a Crusluath a Mach beat at the lower end of the stem is a reversed C thus: O, (vide last line, Plate IV).
- 42. Additional notes, to those here specified, attached to Turluath and Crumluath beats, constitute what are generally known as Turluath Breabach and Crumluath Breabach beats; but even if it were possible to frame them, ciphers for the combinations would be very complicated and the additions are therefore treated as notes separate from the ordinary beats, to which they, in a sense, belong.
- 43. It will be observed on Plate V last line that the \(\frac{1}{4}\) and \(\frac{1}{15}\) Crualuath echoes on low G and low A are given in duplicate, the second of the duplicate for G having a dot under the C, and for A a thick vertical dash. These additional marks are not usually required but they may become necessary in "combined variation", (to be noticed presently) where say a C' beat does not "follow" the C beat above it or the C follow the T. Similar marks may also be used if necessary, below a T cipher.
- 44. Besides the seven variations above specified there may be others generally following the Ground or G, but admitting of no general rule as to construction. These are only denoted by a capital V or Vi, Vii and so on, and they generally follow the Ground or the Thumb (A) variation in sequence. There are also measures which seem in no way to follow the air of the Ground and these are denoted by a capital P (for "Part"). There may be any number of Parts as Pi, Pii, Piii &c.
- 45. The doubling of a measure is shown by an oblique dash after the capital, the trebling by a double dash and so on: thus T' means the doubling of the Turluath, T" its trebling &c. The sequence in playing is that the doubling follows the singling, and the trebling the doubling.
 - 46. At the head of each measure are given the above capitals preceded by numbers which show the order of sequence in playing.

- 47. It will be observed, as a rule, that in the singlings, which are represented by the simple letters C. A, V. D, B, S, L, T and C, there are generally endences and pauses, which are wanting in the doublings, treblings &c: so that the same core may answer for many variations, to be played in the order given at the heading of the measure. For instance in "MacLeod of Rasay's Lament" the second measure D is given with full score and the third measure D' is the same as D, but without cadences and pauses.
- 48. There is however another form of the Dithis (D) doubling, where the couplets of the doubling consist of the first note repeated. A capital R under it shows the note to be thus repeated in the couplet doubling, and if, instead of R, there is a small cross (x), this shows that there is no change in that doubling couplet from what is given in the score of the singling.
- 49. Grace notes may, or may not precede each of the notes of a Dithis beat. The placing of those preceding the first note is obvious. Those preceding the second note should, if possible, be placed on the stem or in line of the stem and above it; but this is not practicable with the lower grace notes and combinations of two or more grace notes.

In this case "above stave ciphers" (vide Plate I) must be used, as already laid down for Turluath and Crunluath.

- 50. In order to prevent confusion and for easy reference, it may be well here to specify the two different meanings of the small St. Andrew's cross—vide examples 5 and 6, 1st and 2nd lines of Plate VI, also the centre example lines 3 and 4 Plate VI, also 1st example line 5 Plate VI. Above or on the stave, as in the first two cases, a small cross simply means the presence of an unusual grace note which is given, or the absence of a grace note where it might otherwise be looked for. A small cross below the staves means that the beat is to be played exactly like the one specified above it.
- 51. Where, in successive measures, regular bests,—like those given in Plate IV,—alone are used, great economy of space becomes practicable by combining the variations under one heading. The most notable instance of this, which is given as an example in the last line Plate VI, is in "The Carles wi' the Breeks", which, written in full, in D. MacDonald's 1st Volume, occupies no less than 29 lines, whereas in Ceol Mor, two lines of music score, with the help of the ciphers, disposes of the whole Publified Researched. The example given speaks for itself as to the management of the cadences and pauses in the doublings. The case

- is a very typical one, from which it will be seen that in the doublings, for the cadences of the singling is substituted a beat—be it Leumluath, Turluath or Crunluath—on the principle note of the cadence in the singling. The only objection to this arrangement is the multiplicity of cipher capitals under the staves, for which sometimes the space available is not too liberal. This anconvenience is unfortunately only too apparent in the example given, but it may be avoided by putting there only one or two apparent cipher capitals, leaving the rest to be inferred, together with order of precedence, from the headings to the measure, and annuances of this will be found throughout Ceol Mor.
- 52. The combinations of D and D' are very simple according to the example at beginning of line 5 Plate VI, but somewhat playing the score first time with cadences and pauses in the singling, and the second time without cadences and pauses is the moubling, as in "Castle Menzie".
- Where a D and a T variation are combined, it will obviously be necessary to change the time; but with the second and think examples in line 5 Plate VI as a guide, this will present no difficulties.

Capital letters used as abbreviations.

REFERENCES ARE TO PARAS. IN THE DESCRIPTIVE LETTER PRESS.

- A. Thumb variation (25).
- B. " Breabach" or Stamping beats (10, 27, 28, 29).
- C. "Crunluath" (37, 38, 39, 40, 43).
- 2. "Crunluath a Mach" (39, 41).
- C.B. " Crunluath Breabach" (12).
 - D. "Dithis" or Couplet (3, 4, 13, 26).

- C. The Ground, Urlar, Thema or Theme (24).
- L. The "Leumluath" best and variation (31).

OMM Ordinary modern music in contra-distinction to Ceol Mor.

- P. For "Part" as distinguished from "Variation" (44).
- R. Marks repeated note in doubling of a Dithis (48).
- S. "Seog" or "Swing" Variation (30).
- T. Turluath best and variation (11, 32, 34, 35, 36, 38, 39, 43).
- 1. "Turluath a Mach" (23, 39).
- TB. Turlualh Breabach (42).
 - V. Variations numbered i, ii, &c.
- XYZ. Play the measure straight through to X and then from Y to Z.

Other cipher abbreviations:-

- × A small St. Andrew's cross—low used (50).
- '"" Small slanting dashes for doublings, trebling &c. (45).

Small dot or horizontal dash on grace note cadences (5).

A horizontal dash under staves halves time of any beat to which it is attached (16).

For application of dots and dashes to ciphers D, C, &c., see paras. referring to those capitals (36, 43, &c.)