

A NEW SYSTEM OF FINGERING THE VIOLONCELLO; OFFERING FACILITIES OF TEACHING, TO THE INSTRUCTOR; AND TO THE SCHOLAR, A READY, EASY, AND NATURAL MODE OF EXECUTING ANY DESCRIPTION OF PASSAGE, IN ALL THE KEYS, AND IN EVERY POSITION OF THE HAND, AND COMPASS OF THE INSTRUMENT: ACCOMPANIED WITH MUSIC OF FIGURED ILLUSTRATION.

IT must be evident, to any person who takes the trouble of studying the finger-board, as delineated and described, that every passage, from G, 12th major, fourth string, to A, the middle of the first string, can be executed in four different positions; and that passages, including the notes above the middle of the first string, may be taken, some in three, and some in two different situations. See examples under letters A, B, C, and D. The notes there, run from C, the lowest *open note* of the fourth string, to A, the middle of the first string. It is evident, that the two octaves and a sixth under letter A, may be all taken by fingering, and thumb-positions, on the fourth string, excepting the last note A, under which there is no finger-board. Under example B, the first four notes must be taken as usual on the fourth string, and the other sixteen notes may be taken on the third string. Under example C, the lowest four notes are to be taken on the fourth string; the next four on the third string, and the remaining twelve notes on the second string. Under example D, the lowest four notes are taken on the fourth string; the next four on the third string; the next four on the second string; and the remaining eight on the first string. Throughout this work, an O, as here, is put under every note sounded, or played on the open string. A x, as under the last note A, always marks the thumb when introduced. Figures, as here, put under the notes, mean, respectively, the finger pressed down on the position of that note. It is obvious, that the teacher must, according to the present mode, frequently point out to the scholar, with considerable loss of time, and labour of explanation, the position out of four, which he may deem the best; and that the scholar, in practising from printed and fingered notes, must guess which of four positions, for the same passage, is meant.

Again, teachers have only *three* distinct appellations for positions of the hand in the lower compass of the instrument. These are, *back-shift*, *half-shift*, and *whole-shift*. In the first, *back-shift*, the first finger is placed on the *semitone* to the open string. In the second, *half-shift*, the first finger is placed on the *great, or less third* to the open string. In the *full shift*, the first finger is placed on the *great fourth* to the open string. There is a *second full-shift*, where the first finger is placed a half note above the fourth note from the open string. In each of these *five* species of shifts, there are two positions of the second, third, and fourth fingers, by an extension of them from the *first*. There being so many positions of the fingers in these *half* and *whole shifts*, it must be manifest, that the practitioner must feel not a

little embarrassed in readily finding the position meant by the instructor, or pointed at in printed works. Relative to the middle and higher compass of the Violoncello, these remarks hold with still greater force: for there, the practitioner's hand must be literally placed where intended; or if left to himself, with even the aid of figured notes, he has a choice of various positions, where, probably, some particular one can only give the smoothness and delicacy of effect required by the spirit and character of the music before him. For the justness of these remarks, we refer to all such as have studied with attention the nature of the Violoncello, and the most advantageous modes of execution. There are works on the science of this instrument, which, in other respects, are masterly; but as indicating the taking of positions of the hand the best adapted to music in various *clefs* and *keys*, it must be acknowledged that they are deficient, and leave this essential subject involved in equal uncertainty and doubt. The writer of these sheets has been long in habits of reflecting on this interesting subject: and he trusts, that the system of fingering unfolded, will be found efficacious; enabling the teacher to name, *precisely*, the position of the fingers intended; and the practitioner to take it, *at once*, without the slightest difficulty or hesitation. It will also appear, that the most natural, simple, and easy transitions of the hand, from one position to another, so as to connect, and as it were condense, the whole fingering of a passage, have been made a primary study. By a close attention to the system of fingering now elucidated, the Violoncello-player will soon find his labour rewarded by a complete knowledge of the whole compass of the Finger-board, and by the most advantageous execution: but he must bear in mind, that continued and unwearied practice can alone give efficacy to theory.

We will now proceed to explain the nature of the *new system of fingering*, the practice of which will be afterwards amply exemplified, in different keys.

See *Figure 2d*. The lower compass of the instrument is told off into *eleven positions*. The first, second, sixth, seventh, and eleventh, are exemplified by four semicircles springing from each. The semicircles refer to the relative positions of the fingers. Each position is twofold; viz. *close*, and *extended*. In the *close position*, there is a finger placed on *each semi-tone in succession*. In the *extended position*, the first finger remains in its place, and each of the other three fingers is *moved forward a semi-tone*; leaving, of course, an uncovered, or unoccupied, semi-tone between the first and second finger. Such is, distinctly, the whole of this simple principle of fingering in *ten* out of the eleven positions. The close position only is applied in the *eleventh*, because, the fourth finger cannot conveniently be thrown forward there, as far as C natural.

The positions specified, are exemplified on the first string, *Figure 2d*.—The *first position* is what is usually termed the *back shift*. Here the first finger is placed on A sharp, or B flat: the second on B: the third on C natural: and the fourth on C sharp, or D flat. These positions of the fingers, in the *first position close*, are marked in the *Figure*, 1st Finger;—2d Finger;—3d Finger;—4th Finger. To give the *first position extended*, the first finger remains fast on A sharp, or B flat; the other three fingers are raised from



the string, and projected forward a semi-tone: that is, the second finger is moved forward from B to C; the third, from C natural, to C sharp; and the fourth, from C sharp, or D flat, to D natural. The figures 2d, 3d, and 4th, marked above, on the semicircles springing from the situation of the first finger, refer to the extended attitude of these other fingers. Let the first finger, now, quit the first position, and be placed on B natural; and let the other three fingers be placed, successively, on the following semi-tones, C, C sharp, and D, and we shall have the *second position* close. Let the first finger remain fixed on B, and let the other three fingers be, each, thrown forward the extent of a semi-tone. This will bring the second finger on C sharp; the third finger on D; and the fourth on D sharp, or E flat; and, of course, C natural will remain uncovered. This position close, and extended, is marked by distinct semicircles; and is what may be called, the *common position* in the lower compass. A similar description is applicable to the first finger placed on C natural, the third position: and to the first finger placed on C sharp, the *fourth position*. The third and fourth positions close and extended, are what, less definitely described, are termed *half-shift*. The first finger placed on D, gives the *fifth position* close and extended, as described. The *sixth position* places the first finger on D sharp, or E flat; and the semicircles described there, shew the close and extended position. The fifth and sixth positions close and extended, are what, less accurately defined, are called *full-shift*. The first finger placed on E, gives the *seventh position* close and extended. This position is marked by semicircles. The first finger carried to F natural; F sharp; G; and G sharp, or A flat, will, successively, give the close and extended positions at F, F sharp, and G; and the close position only of G sharp or A flat. Five of the positions are only marked by semicircles, to avoid rendering the *Figure* confused. It is to be observed, that the description of the positions is equally applicable to the other three strings, as to the first string, on which the *Figure* is projected. Some of the positions are more peculiarly applicable to *flat*, than to *sharp* keys; and *vice versa*. For instance, the first, third, sixth, and eighth, are generally flat positions; and the fourth, ninth, and eleventh, sharp positions. The fifth, second, and seventh, are, generally, natural positions. But this remark applies only generally, as all the positions change their characters according to some transitions from one key to another.

In applying the above description of playing positions, to printed music, the best attitude of a player; the most eligible mode of holding the instrument; and the most neat and efficient manner of bowing, are expected to be described. The real fact is, that no degree of description can possibly convey any adequate idea of these three essential points; and an *actual drilling* by a good master can, alone, effect this object. A few general remarks may not, however, be altogether useless.

The instrument is, in most instances, held too low; and too much sunk between the legs. This occasions too great an inclination of the body forward, when the middle and higher compasses are played in. A man about six feet high, sitting upright, should have the upper pins of the violoncello on a level with the eyes. The right leg cannot be

held perpendicular, but must be a little inclined outwards, to support the instrument. The outer rim of the instrument should press against the inside of the upper part of the calf of that leg; and the rim, and part of the side of the violoncello, should rest against the same part nearly of the calf of the left leg. The instrument is, generally, too much inclined backwards. The fingers of the left hand should be, as much as possible, at right angles with the finger-board, and form curves over it. The thumb is naturally on the level of, or as high as, the fore finger; but it ought to be, with its ball supporting the instrument, opposite to the middle finger. In the eighth, ninth, tenth, and eleventh positions, the thumb touches the angle under the neck of the instrument. The left elbow must be very little raised; otherwise, the fingers will not be at right angles to the finger-board. The fingers *behind* the note pressed, are to be down also, in their proper positions, in order to give firmness and sweetness to the tone, and to avoid that harshness of sound too frequently heard in the attempts of imperfect players; more especially, when they venture, at too early a period, to try rapid passages. The fingers ought not to be raised more than just to clear the strings.

The bow must be about two inches above the right thigh, and two and a half from the bridge; and it ought seldom to be raised from the strings. It is balanced between the ball of the thumb, and extremity of the inside of the first joint of the middle finger, which has its end on the inside resting against the hair. In playing, the fore-finger and third finger have a movement, respectively, which vibrates on the bow; the one acting on it in the up, and the other in the down bow. It is a general rule to draw the bow parallel to the bridge: but to do this *literally*, is not, strictly speaking, possible; for, in quick passages, the action is principally from the wrist. Supposing the wrist is held stiff, the fore arm and hand must act as the radius of a circle, however small; and consequently, each stroke of the bow must, necessarily, describe a segment of a circle, or rather a mixed curve, on account of some small degree of motion from the elbow, particularly where the bow passes from one string to the second, or third, from it. To prevent this effect, the wrist must act on itself, as a centre. The curve in which the bow moves, approximates, nearly, to a straight line; but never can be *exactly* such. The arm at the shoulder should never be raised much; as such a position, though shewy, cannot be long maintained. The action of the whole arm, and even of the arm to the elbow, can seldom be required; excepting where time is slow; where a passage must be forcibly expressed; or where a compound cadenza is struck.—We again recommend that all these considerations be referred to the absolute instruction of an eligible master. Man is an animal of habits; and physical and immoral ones, are equally difficult to correct, when long use has rendered them prevalent.

The situations of the fingers in the *eleven positions* of fingering in the lower compass of the Violoncello, have been, thus, fully described. We shall now apply the *new system of fingering by positions*, to actual music, in a flat, sharp, and natural key.

The examples under letters E, and F, are in three flats. The first four notes under

E, are E flat; F natural; G; and E flat. The figures 1, 2, 4, and 1, placed under these notes, mean, the first, second, fourth, and first fingers used to stop these notes, respectively. The line drawn under the figures, shews that these four notes are all fingered in the eighth position. The figure 3 placed under the 8, with a line between them, shews that the eighth position, on the third string, is meant. The large dot to the left of the figure ·8, shews that the position is an extended one: for where no dot of this nature appears, a close position is *always meant*. From this description, the fingers can be, at once, placed on the extended eighth position of the third string. In *every position*, the first finger is *always* supposed to be placed on the *first note* of that position.—The next four notes are, F natural; E flat; D; and B flat. Without quitting the eighth position extended, the notes F and E are taken in it, by the second and first fingers marked 2, 1. The next note D, is played open on the second string; and o, meaning open, is marked under it. The last of the four notes, B flat, is taken by the second finger, marked 2, under it. It is taken in the eighth position, on the fourth string, denoted by the ·8 under the 2; and the 4 (meaning fourth string) under the ·8 (which ·8, with the large dot to the left of it, means the extended eighth position) *always means the place of a string*, here the fourth.

The same eight notes are placed under the second letter E, with precisely, the same fingering; but with this difference, that they are played in the first extended position of the second and third strings, the last note but one D being played open, as in the first instance.

The next example is marked F. The four first notes are taken in the tenth position, on the second string. The number of the position, 10, is, as before, placed under the figures denoting the fingers; and the figure 2, under the number 10, shews that position 10, is on the second string. There being no dot to the left of position 10, it follows, that the position is a *close* one. Without quitting this position, the next four notes are played in the same position on the third string, as denoted by 3 under 10.—The same eight notes are again repeated under the second letter F, and are fingered precisely in the same manner, but in the third close position of the first and second strings, as marked 1, and 2, the lowest figures.

Under example G, the first minim, and following crotchet G, are taken in the ninth close position of the third string, as marked. The fourth finger marked ·4 gives these notes; and the heavy dot placed *on the left* of figure ·4, indicates that the note G may be placed, harmonically, in that position. Therefore, in the future examples, a dot so placed *always* means that the player, if he chooses it, may play such note, harmonically; a thing which always gives a peculiar sweetness and expression to the passage. The same example G is repeated under the second letter G, with the same fingering; but is played entirely, as marked, in the first position on the second and third strings. Here, the note G is not marked with the harmonic dot; because the harmonic under G the fourth

note of the second string (*See Fig. 1.*) is that of the double octave to D (the fundamental of G) in a sharp key.

Under letter H, an example is given in three sharps. Here, the first three notes are taken in the ninth extended position, fourth string; and D sharp, the fourth note, is taken by the first finger on the eighth position, third string. The next four notes are in the ninth position, third string, and extended. The following four notes are in two positions; *viz.* the first three, F sharp, E, and D sharp; are in the eighth close position, third string; and the fourth, in the eighth close position, fourth string, &c. The same example is repeated under the second H, with the same fingering, but in the first and second positions of the second and third strings.

The example under letter I, is in a natural key. The first four notes are in the tenth extended position on the third string. The next three notes G, F, E, are taken in the ninth position third string; and the C, the last note in that bar, is played harmonically in the ninth position, fourth string. The first note F of the second bar, is taken without quitting the ninth position. The next note D, is played open. The next G, is played harmonically in the same position; and G, the octave below, is played open. The last four notes in the second bar are played in the ninth position, on the fourth, second, and third strings; and this easy and expressive mode of playing these four notes, thus arranged, very frequently occurs in this key; the first and last being readily played harmonically.—Under the second example I, the same passage is marked with the same fingering; and is all played on the first, second, and third strings, all being in the second position, excepting the open notes, and the first four notes, which are played in the extended third position, on the second string.

It appears from the above detailed examples, that the first position is the same as the eighth on the next string *below*; that the second position is the same as the ninth on the next string *below*; and that the third position is the same as the tenth on the string immediately *below*; and, also, the fourth close position is the same as the eleventh on the next string *below*.

This easy and comprehensive system of fingering in the lower compass, extends to one note, only, beyond the first octave of each string; and includes every description of accompaniment in the lower, and middle compass of the instrument. The use of the thumb in every compass, will be attended to. To come up to a Lindley in wonderful execution, brilliancy, and force, would be a vain effort to attempt; but we are acquainted with a private gentleman who is only secondary to this celebrated performer. The respectable gentleman meant, accidentally lost the fore-finger of his left hand. This has forced him to use his thumb in the lower compass; and the consequence is, that his tones, from the firmness of his action, are finer and more expressive there, than common fingering can produce. This affords an argument and sound reason for introducing, at an early period, the use of the thumb in the lower, as well as in the higher compass of the Violoncello.

We shall now proceed to exemplify the fingering of the scales, from the lowest semi-tone, to the first octave. The methodical modes pursued, will be, to give the first, third, fifth, and eighth of each semi-tone (as a key-note) on one string; and to descend the octave by an easy chaunt. The same octave will be given with varied fingering, on one string, and on two contiguous strings containing its notes. This exemplification will be referred across the strings, in order to demonstrate the same process, regularly, on all the strings; and also to shew that the *same fingering* is applicable on *different* strings, and in *different* keys. Excepting where the thumb may be introduced, it will be quite unnecessary, after the full explanation given above, to advert to the figures expressive of the fingering, positions, and strings *figured* in the scales. The eight notes of each octave will be fingered in succession, ascending (and in some instances descending) on two strings, and, also, on one string only.

The various clefs are explained under letters J, K, L, M, and N. All music for the Violoncello, might be conveniently reduced to two, the *bass* and *treble clefs*: but others frequently occurring, it is necessary to explain them. The *tenor clef* is five notes above the bass. The true *treble clef* (See K) begins with the lowest note on the Violin, or the fourth note on the second string of the Violoncello. It is played an octave lower, as at letter L, excepting in such places where 8<sup>a</sup> *alto*, is printed. The *counter tenor* (See M) is seven notes above the same notes considered as bass notes: but in passages only, this clef must be so played, for as mere accompaniment, the counter-tenor note, regarded as a bass-note, may be played one note lower than it appears. This reduces it just an octave below *its real place*. In lieu of the *soprano clef* (See N), the treble clef may be always substituted.

Under letter O, five different modes of fingering the eight notes of the key of G major, are exemplified. The first, second, and third modes are all on one string, the third. The first mode is strictly applicable to this *Key*. The second mode is equally applicable to this, in common with other sharp keys. In the third mode, the thumb, marked by a x, is placed on D, the seventh position, in ascending and descending. The first four notes are the common chord. In the two last bars, the octave is regularly descended. The whole forms a pleasing chaunt, enabling the ear to judge, accurately, of the justness and interval of every note in the octave. In the fourth mode, G major is fingered on the third and second strings, in one position of the hand. In the fifth mode, the second finger is applied on B and F sharp; because in fingering sharp keys, the fourth finger must extend to F sharp, on the fourth string; to C sharp, on the third string; to G sharp, on the second string; and D sharp, on the first string. The two last examples of each of the positions (excepting the eleventh) consist of the eight notes of the octave fingered on two strings; and the same on one string. The octave is descended similarly, or by reversing the fingering, as in the last example under letter P.

The key of A major, the open note of the first string, is fingered according to the second and third modes. The key of D major, the open note of the second string, is fingered

according to the second, third, and fifth modes. The key of C major ; the open note of the fourth string, is fingered, occasionally, according to all the five modes.

Under letter P, appears the key of E major, three flats, fingered in four different manners. The first and second modes are both entirely on the second string. The third mode is on the second and third strings, concluding on the third string without quitting the thumb position-eighth. The fourth mode is fingered on the first and second strings. The key of B flat major on the first string is fingered all on that string ; similar to the first and second modes. The key of A flat major, four flats, is fingered on the third string ; on the third and fourth, and on the third and second ; similar to these four modes. The key of C major on the fourth string, with seven sharps, is fingered like the first, second and fourth modes.

Under letter Q, is exemplified the key of E major, four sharps. The first mode gives the octave fingered on the second and first string. The second mode gives the octave all on the second string. The third mode gives the same octave all on the second string, and five notes are fingered with the thumb in the ninth position. The fourth mode finishes the octave on the third string, in lieu of descending to the fundamental note on the second string. This last mode may be had recourse to in all keys, and will not, therefore, be repeated. The key of D major on the fourth string, and of A major, three sharps, on the third string, are fingered in the first manner ; the key of B major, five sharps, on the first string, is fingered according to the second, third, and fourth modes.

Under letter R, is an ascending and descending chaunt calculated to familiarize all the notes of an octave in the major key, to the ear. The same chaunt is equally applicable to all keys, major and minor ; and the tuning of keyed instruments may be proved by it.

We are now arrived at the scale of the third position, under letter S. The first mode fingers the octave on the first and second strings. The second mode fingers this octave all on the second string, where five notes are taken with the thumb in the tenth position.

In works of this description, the octave is generally exemplified as in the third and fourth modes under letter S, where the eight notes are given in ascent and descent. The ascending chord, and descending chaunt, may, probably, impress *all the characters* of the octave more on the memory : besides, the two last bars of the modes, give the ascending and descending octave in a less uniform, and more varied manner, than a succession of crotchets, as in example third and fourth. The key of B flat, third string ; and E flat, fourth string, are fingered like the first mode ; and C natural, first string, like the second mode.

Under letter T, are the scales of the fourth position B major, five sharps, on the third string. The first mode gives the octave on the third and second strings. The second mode gives the octave all on the third string, where four notes are taken, with the thumb in the eleventh position. The key of E major, four sharps on the fourth string ; and the key of F sharp with six sharps on the second string, are fingered like the first mode. The key of C sharp, with seven sharps on the first string, is fingered like the second mode.

Letter U states the usual scales of G major, the fourth note on the second string. This

is the first note of the fifth position, on all the strings. The first and second modes are fingered on the second and first strings. The *key* of F major on the fourth string, and the *key* of C natural major on the third string, are fingered similar to the first and second modes. The *key* of D major, fourth note on the first string, is fingered similarly to the third mode.

In the third mode of this position, the thumb appears placed on D, the octave to the open note of the second string. This position of the thumb *commences the tenor-pitch of the Violoncello*; and therefore T, *meaning tenor-pitch*, is marked under the thumb. The figure 2 appears under the T, meaning that the thumb is in the tenor-pitch on the second string. The tenor-pitch will be, *thus noted*, till the thumb arrives at the *Violin-pitch*, at A (See Fig. 1.) one third part of the string from the bridge.

The sixth position, under letter V, is exemplified in the *key* of A major, four flats, second string. The keys of F sharp on the fourth string, and of D flat on the third string, are fingered according to the first, second, and third modes of this example. The *key* of E flat major, sixth position, first string, is all fingered on that string, according to the fourth mode of A major flat, fingered all on the second string, as in the present instance. The thumb in the fourth mode, is placed on E flat, the first semi-tone in the *tenor-pitch* (See Fig. 1.), marked T, with 2 under it, denoting *tenor-pitch, second string*. Five notes appear taken in this easy thumb-position.

The seventh position, under letter W, is exemplified in the *key* of A major, three sharps, second string. The first and second modes are on the first and second strings. The dot marked on the left of the .3 under A, shews that it is taken *harmonically*. The third mode is entirely on the second string, where the thumb, placed in E, in the *tenor-pitch*, commands five notes in that situation. The *key* of D major, on the third string, and the *key* of G major, on the fourth string, being both in the seventh position, are fingered similar to the first and second modes. The *key* of E major, in the same position on the first string, is all fingered on that string, similar to the third mode instanced here.

The eighth position, under letter X, is exemplified by making the next semi-tone, B flat, the *key* note. The first and second modes are fingered on the first and second strings; and the third mode is fingered entirely on the second string, where five notes are taken with the thumb placed on F. The *key* of E major flat on the third string, and the *key* of A major flat on the fourth string, both in the eighth position, are fingered like the first and second modes. The *key* of F natural, first string, eighth position, is fingered all on the first string, like the third mode.

The ninth position is under letter Y, in the *key* of B major, on the second string. The first and second modes are fingered on the first and second strings; and the third mode altogether on the second string, where six notes are taken in the *tenor-pitch*, the last of them E, by the first finger, in descending from the thumb-position. The *key* of E major on the third string, with four sharps, and the *key* of A major on the fourth string, with three sharps, being both in the ninth position, are fingered like the first and second modes.

The key of F sharp in the same position on the first string, having six sharps, is fingered all on the first string, similar to the third mode exemplified here.

The tenth position is exemplified under letter Z. The first mode is on the first and second strings, and descends to conclude on the third position, first string. The second mode concludes with the thumb in the tenth position, second string, in which position the last five preceding notes are taken. In the third mode, the whole ascending and descending octave is taken on the second string. After the first two notes, the thumb moves up to G, and that is the highest tenor-pitch position for the thumb. Five notes are taken thus, after which the thumb descends to the tenth position, in which the last six notes are played. The key of B flat on the fourth string, and of F natural on the third string, lying in the tenth position, are fingered like the first and second modes. The key of G major on the first string, in the tenth position, is all fingered on the first string similar to the third mode.

The series of scales concludes with the eleventh position given as D flat, and C sharp major, being the same notes. This scale is carried up to the extremity of the finger-board or to E flat, or D sharp major, which want a semi-tone of the "Harmonic Nineteenth Major." The first three notes in the example, are rather a constrained stretch of the fingers as an extended position. In the eleventh position, the first finger rests on the semi-tone, or seventh major of the first octave. In all fingering beyond this, the thumb must, necessarily, be constantly used. On the fourth note of the example, the thumb is placed on G flat or F sharp, the last semi-tone within the tenor-pitch. Five notes are taken in that position on the second string. Without moving the thumb, the next four notes, beginning with E flat, or D sharp are taken on the first string; and a V, meaning *Violin-pitch* (See Fig. 1.) is placed under the thumb mark x. Under the V appears the figure 1, indicating that the Violin-pitch meant, is on the first string. Every position of the thumb beyond E (including all the notes on the highest third part of each string), will be a *Violin-pitch* or position. The eleven lower positions, the tenor-pitch including four notes in the second octave, and the Violin-positions above these, will clearly indicate the situation of the hand and fingers, in every compass of the instrument. It must be recollected, that in springing the thumb from one position to another, its movement must not be in a straight line parallel to the finger-board; but in a segment of a circle, as such small curve is essentially requisite, in order to carry the thumb neatly and accurately to any new position. The practice of these ascending chords, and descending scales, in all the positions, including the same position (though a different key) on each string, cannot fail to give a ready command of fingering in the lower and middle compass of the instrument. To render the rise and fall of all the notes of each key familiar, the descending chaunt should be practised also reversed or ascending from the close on the fundamental note, to the octave. The grace-note is thrown in to combine the fingering of the highest four notes of each octave. The chaunt under letter R, will, if applied to each octave, in all the positions, impress the essential combinations of the notes within the octave, forcibly and pleasingly on the memory.

Fingering in the upper compass of the instrument, though more shewy, is probably



less difficult than the necessarily very varied action of the hand in the lower, and middle compass. In the upper compass, the whole octave lies within the space of *one thumb-position*; and this circumstance is what, principally, constitutes the comparative simplicity and facility of fingering all beyond the *eleventh position*.

A few examples will be quite sufficient to illustrate the whole system of fingering on, and above the middle of the strings.

Opposite to marginal letter *a*, there are four examples of fingering the first octave D major, with the thumb commencing on the first *tenor-position*. In Example 1st, the first four notes are taken as marked; the thumb being on D, the middle of the second string. The next four notes are taken in the same tenor-position, but on the first string. The fourth finger takes the semibreve E, which is a very fine and soft harmonic. The octave, as appears, is descended to the key note, with the same fingering reversed.—Example 2d ascends and descends the octave in one *tenor-position* of the hand. Example 3d, concludes the octave in the fifth extended position of the first string. In fingering all *tenor* and *violin-positions*, the descent may always be made in this manner, with reference to thumb-positions in descending; or the close may be made on the next lower string, as in Example 2d.—In Example 4th, the octave is *all* fingered on *one* string, the second.—Here, the first two notes are in the first tenor-position. The thumb is sprung forward to A, the first *violin-position*, in which five notes are taken; the third finger playing D harmonically, as indicated by the large dot on the left of 3.—The thumb, then, quits the *violin-position*; and concludes the octave, by playing the last six notes in the first tenor-position. The fingering of the key of A, middle of the first string, is executed all (similarly to Example 4th) on the first string. The *key* of G, middle of the third string; and the *key* of C, middle note of the fourth string, are fingered in all respects like Examples 1st, 2d, 3d, and 4th.—Example 4th carries the hand to the last note D, of the double octave to the open string.

A second set of examples of *violin-positions* is given opposite to marginal letter (b), a fifth higher than the four preceding examples. In Example 1st, the thumb is placed on the twelfth major A, on the 2d string; and four notes are played in this *first violin-position*. The next four notes are taken on the first string, and in the same position. The scale is descended in the same manner, with reversed fingering, the harmonic notes being dotted as before. In the second example, the octave is fingered on the first and second strings, and in one violin-position. In the third example, excepting the two first notes, the octave is fingered on the first string; the last six notes being played, having the thumb in the *first tenor-position* on the first string. The fourth example is fingered throughout on the second string. Here the notes lie close to each other; and, therefore, the second finger takes the third note E; and the third finger the *nineteenth major* A, a fine harmonic beyond the finger board. The seventh, sixth, and fifth, are descended with the thumb placed in E, a *violin-position*. The thumb is, then, thrown back to the fundamental note A, and the last six notes are played in this *first violin-*

*position*. The grace-notes are here marked by small figures. The major seventh G, lies at the *very extremity* of the finger-board.

The *key* of D on the third string, and the *key* of G on the fourth string, in the same position, are fingered according to these four examples. The *key* of E, in the same *Violin position* on the first string, is fingered *all* on that string; similar to Example 4th in the present instance. The *harmonic* seventeenth major F, is a fine harmonic in the fourth example.

Opposite to marginal letter (c), Example 1st places the thumb on D, the first note of the third octave of the second string. The seventeenth and nineteenth major are taken in that *Violin position*, with the first and second fingers. The thumb is then placed on the first note D of the fourth octave. The chord of that octave is fingered as appears in that position. The octaves are descended by reversing the fingering, which brings back the thumb to D, where the example commenced. *All* the notes in this example are harmonics.

Example 2d includes the extremes of the instrument, and is a modulation on the third string throughout. It gives a connected view of the second, fifth, and ninth extended positions in the lower compass, united to the tenor-pitch, blended with violin positions. The three last bars, are three consecutive chords of G; and the last terminates at the extremity of the fourth octave.

Opposite to marginal letter (d), Example 1st, is inserted the *Chromatic Scale*, from A, the open note of the first string, to E, the nineteenth major. Though sharps are marked, they of course may become flats, according to the key. It is recommended to practise the eleven positions numbered on this scale, first close, and then extended, in every position exemplified for each semi-tone. The practice of the positions close, and extended, and consecutively, will soon produce a great facility of fingering in the lower compass.

From the tenor-pitch to the end of the scale, the successive semi-tones may be practised by taking five in each position: always shifting the thumb to the sixth, in order to take the following five.—Much benefit will arise from practising in the above manner, occasionally, on each string.

The manner of practising the positions on all the strings, is exemplified fully under Figure 2d, and on the first string. The first finger in B flat or A sharp, is followed by the second, third, and fourth; each on the following semi-tone. The close position being thus practised, the first finger remains fast; the second finger is thrown forward to C natural; the third, to C sharp; and the fourth, to D as the extended *first position*. The first finger is then moved forward a semi-tone, or to B natural, the *second position*; and there the *close* and *extended positions* are practised in the same manner. This is to be continued (on every string) till the first finger arrives at G sharp; C sharp; F sharp; and B, the eleventh and last position *on each string*. It is to be observed again, that the first finger, both in ascending and descending, is always supposed placed on the first tone (or semi-tone it may be) of each position.—In the extended position, the semi-tone

next to the first finger, remains of course, uncovered, because the other three fingers occupy their situations. This practice cannot be too much carried on, even by good players.

Under letters (e), (f), and (g) are three examples of the minor modes, in the keys of C, D, and E. It will be immediately perceived, on inspecting the fingering of these examples, that our new system of fingering, is equally applicable to the *major* and *minor modes*. Independent of the difference of character between the two modes, in reference to their effect on the mind, the apparent difference consists in reducing the seventh, sixth, and third, a semi-tone. This, as in the first example of C, will give C natural major, reduced, or changed to the key of C minor, with three flats. It is to be observed, that in ascending a minor scale, the great sixth and seventh are requisite, and not the same notes flattened. The principal reason of this is, that harmony requires, that the step leading into the octave should be the semi-tone, or seventh major, which, on that account chiefly, has been termed the *sensible*, or *leading note*. From this it appears, that the minor mode, principally displays its affecting character, in descending passages: as in the upper part of the octave, both modes coincide. Some composers do make use of the flat sixth and seventh, in ascending; but the effect is not adequate, and the passage into the octave cannot, without shocking the ear, be otherwise than by the major seventh. In general, three flats added to a flat major key, will render it minor. Three sharps must be taken from a sharp key to make it minor; as here in the key of E, which appears with one sharp. If there be two sharps, as in the major key of D, the sharps disappear, and one flat is introduced, as under Example (f). The key of C natural major, has three flats given to it, or E, A, and B; the third, sixth, and seventh, being flattened, to constitute it a minor key. As the major key, as that of G, has one sharp, it disappears, and two flats, B and E, are added. The key of A major sharp, becomes minor, by taking away the three sharps; or, in other words, by reducing them to naturals; excepting in ascending the last part of the octave.

In singing, it is harsh to rise or fall by sixths major. Such forbidden intervals are deemed *salti vietati*. On the contrary, in the minor mode, a rise or a fall by sixths increases the plaintive or mournful effect of music in this affecting mode.

This system of fingering in every compass of the instrument, without the possibility of mistaking one situation of the Violoncello finger-board for another, will, it is trusted, be found easy and simple. Before it thus reaches the public, it has experienced the marked approbation of eminent judges of the subject it involves. It is the result of much reflection, and continual study of a science elucidated by few.

In a work of this description, it is usual to give some explanation of musical notation; of time; and of the various signs, marks, and characters constantly occurring in the course of practice. These heads will be adverted to as briefly as possible.

Under letter (h) is inserted the time-table, in a very comprehensive form, as used by

Woldemaar.—Under letter (i) the *rests* adequate to the various *notes* are marked.—Under the letter (j) there is an example of time. *Adagio* is instanced; as the slowest time, excepting *grave*. A number of experiments were made to ascertain the length of a pendulum which would vibrate eight times during the time of playing *one bar* in *adagio*.—Six-and-thirty inches from the centre of the ball, to the point of suspension, will vibrate about sixty-four times in a minute, reckoning a vibration for every time the string, or rather the plummet of the pendulum passes over the perpendicular. This will be found to correspond, *very nearly* with the common *adagio*-time. The second instance under (j) gives *allegro*, which may be taken as the *half* of *adagio*, by making a bar, or four crotchets, equal to four vibrations of the above pendulum. The next example (k) *allegro*, has three in a bar, equal to three vibrations of the pendulum. In the second line under (k) the six quavers in each bar, are, of course, played, during three vibrations of the pendulum. Eight quavers in a bar, will be played precisely in the time of eight of these quavers. The figures above, and below the notes, in these two examples, mean distinct vibrations; and we would strongly recommend practising occasionally before the pendulum, whose vibrations are arcs of *varying dimensions*, but vibrated in the *same time*, till the force of gravity stops it. If made to vibrate in the space of a foot, it will go about ten minutes; and the last vibrations will be made in less than an inch. A string attached to a common musquet-ball, will make one sufficiently exact: for unless actually moving by clock-work, the vibrations of theory and practice will not quite coincide.

The next most important measure of time is *largo*. We think a pendulum twenty-four inches in length, which will vibrate about eighty times in a minute, will give vibrations nearly equal to this time. The first line of the example under letter I, is in this time, with three crotchets in a bar. The upper figures mean, each, two vibrations, as marked by the second set. The second line has six quavers in a bar, as numbered, and two of these quavers are played in the time of two vibrations. The common time, marked  $\text{C}$ , is nearly the *half* of *largo* as here specified; as common time, marked  $\text{C}$ , is the *half* of *adagio*.—The notes of these examples under (k) and (l) are taken from *Renaigle*; and *largo* is added merely to adapt them to the explanation here given. These simple pendulums may be constructed in five minutes; and they are here applied to *adagio* and *largo*-times, as being the foundation of all others, excepting *grave* which will require a pendulum about forty inches in length.

Opposite to marginal letter (m) is inserted the usual mode of playing dotted notes; a subject of some difficulty to tolerable players. This is of much importance, as *accenting* the notes *according* to the dots, gives the leading character, and general effect to a passage.

Letter (n) simply indicates the value of dots attached to notes: a thing to be considered, *previously*, to the last article. The articles opposite to letters *o* and *p*, are inserted, merely because their omission might appear a defect.

The marginal letters (q), (r), and (s) give the figures indicating the various times, of which C,  $\mathbb{C}$ ,  $\frac{2}{4}$ ,  $\frac{6}{4}$ ,  $\frac{6}{8}$ ,  $\frac{12}{8}$ , are generally reckoned common time. In playing the *crescendo*, *diminuendo*, and their union, the *Fermato*, great care must be taken, not to alter the time.

Opposite to letter (t) is the usual mode of marking time, by the action of the foot; and *d* means down, and *u* up foot. It will prove of much benefit to correct the movement of the foot, by means of the pendulum. For instance, in playing common time, four crotchets in a bar, the foot goes down, and remains down during the second vibration; rises with the third vibration, and goes down with the fifth vibration, or first crotchet, or note of the next bar. To practise quavers in the same time, let 1, 2, 3, 4, be counted during the time the foot is going down, and is down; and 5, 6, 7, 8, while the foot is rising and up; and repeat this practice till perfect in it. To play semi-quavers, count 1, 2, 3, 4, —1, 2, 3, 4, during the time the foot is going down, and is down. Count 1, 2, 3, 4, during its rise, and 1, 2, 3, 4, during its continuance up with the fourth vibration, or crotchet of the bar. The same idea may be applied to all the other times, by considering the number of vibrations adequate to the bar, combined with the action of the foot, which must be without noise or gesticulation, excepting a little, when leading.—The semi-breve in common time, being adequate to four crotchets, or four vibrations; and the minim being the half of this, these two measures of time will be readily counted by the pendulum, and thus impressed on the memory. The quavers, and semi-quavers, will by habit of practice with the foot and pendulum, be played with equal justness of time. The playing of quavers, semi-quavers, and demi-semi-quavers, conjoined in various combinations, can only be effected in true time, by mere force of habit, after an indispensable knowledge of groundwork of time, has been acquired, practising nearly as above.

Opposite to marginal letter (u) is inserted a thorough-bass chord, which is placed opposite to letter (v) also, with a view of exemplifying the fingering of chords.

The chord first placed there, has the three notes D, B, and G. The fingering is marked immediately under, in three lines. The highest line, marked  $\times T 2$ , refers to the highest note D. The  $\times$  with T on its right, shews that the thumb is placed in a tenor-position, and the 2 on the right of the T, shews that the tenor-position is on the second string. In playing a chord, when once the thumb (or it may be the first finger) is fixed, the other fingers used, easily find their places. In the present instance, the thumb being placed, the first finger is applied on B, tenor-position, third string, all marked as here, 1 T 3. The third or lowest note of the chord G, is taken by the third finger on a tenor-position, fourth string, being marked 3 T 4. The same notes in a chord, at the beginning of the second bar, are fingered in the same manner, excepting that the second finger takes the B, instead of the first. The same three notes chorded, appear in the middle of the third bar. In this case, they are fingered in another situation; for the thumb is placed in the fifth position on D, first string, marked  $\times 5 1$ . The first finger is placed on B, second string, ninth position, marked 19 2. The third finger is placed, *harmonically*, on the middle of the third string, T position, marked 3 T 3. The second chord in the first bar has, downwards, the letters B, G, and D. Here,

the thumb is placed on the second position B, first string, marked  $\times 21$ . The first finger is placed on G, fifth position, second string, marked 152. The third finger is placed on D, seventh position, third string, marked 373. The same chord, middle of the second bar, is fingered with the thumb placed in the ninth position, and the first and third fingers, at the same time, in tenor-positions, on the third and fourth strings. The chord at the beginning of the third bar, contains, downwards, the notes G, D, and B. The thumb is placed in the tenth position first string, marked  $\times 10,1$ . The other two notes are fingered with the first and third fingers in tenor-positions, respectively, on the second and third strings. The last chord of the first and second bars, has downwards, the notes G, D, and B. The G is had by the thumb in the fifth position, second string marked  $\times 52$ . The other two notes, as marked, are had, at the same time, by placing the first and third fingers in the seventh and eleventh positions, respectively, on the third and fourth strings. It appears from this, that in fingering chords, the position stopped by the finger used, is marked; whereas in fingering single notes, the position meant is *always* that under the first finger, or thumb.

Opposite to marginal letter (w) are examples of chords, of four notes fingered. Here the first finger, laid flat on two strings, stops a note on each string.

Example under letter (x) gives a few bars of an arpeggio from Renaigle, but fingered according to our manner. In fingering the chords, the o means open note. The arpeggio is bowed with an up bow, for the first two notes; and a down bow, the next two. The dots under the slur, shew that the notes are *feathered*, or played *staccato*, under the slur. As for bowing, it is a general rule, if possible, to give the first note of a bar accented, with a down bow. When, therefore, after a rest of any kind, an odd number of notes appear at the end of a bar, begin them with an up bow, which will bring in the first note of the next bar, a down bow. If the number (after a rest) at the end of a bar, be even, begin them with a down bow, to produce the same effect. Two or three notes may be slurred, or staccatoed, to bring in a down bow, at the beginning of the next bar. A good player will, however, find all this a matter of indifference.

Example (y) is an instance of octaves from Renaigle, but fingered by our mode, on the first and second strings. The A at the beginning, is an octave lower than the A placed under the mark,  $8^{\text{va}} \text{ } \overset{\text{alto}}{::}$ ; being the middle of the first string, and played also, as twelfth major, second string. The *alto* continues till the word marked *Ioco*, brings the thumb on D the middle of the second string. In all the examples hitherto given, the true treble A, middle of the first string is *meant*; but as it is generally played an octave lower, or the open note of the first string, it will be so meant in future, excepting where the mark  $8^{\text{va}} \text{ } \overset{\text{alto}}{::}$  raises it to its *true place* in the scale.

Opposite to marginal note (z) is an enharmonic andante played by *Mestrino* at Paris. The enharmonic style was prevalent among the ancients; but there are no distinct traces of it later than the era of Alexander. It is on record, that it was deemed the most captivating species of music among the Greeks. It consisted of quarter notes, and major thirds, according to which idea, nearly, *Mestrino* has given the present instance. It is

played by touching the first note (see bar A) and sliding the finger along the string to the next note played distinct. The first finger is placed on B, the first position, first string. That note is articulated, and all the quarter-notes, till the finger arrives at the great fourth D, which is played distinct. The intervals between the notes of the Violoncello being considerable, afford scope for displaying the enharmonic style. How far this *groaning music* (*touches* of which are now frequently introduced by very eminent performers) may be calculated to please a modern ear, this easy specimen will furnish an opportunity of evincing.

To instance the fingering of chords, the perfect chord of G major is given. The minor chord of G is similar, with the difference of a minor third and sixth, B and E flat. It is evident, by inspecting *Fig. 1*, that the perfect chord is, precisely, the *harmonics*, twelfth, octave, and seventeenth major, reduced to the third, fifth, and octave of the fundamental note; and on this principle depends nearly the whole system of thorough-bass and chords. This will appear by a reference to letter (z 1) where the *harmonics* mentioned, appear, first, unreduced; and reduced in the two following instances; the last being the first, third, and fifth. Any of the three chords specified, may be taken with the fundamental bass. The bass of  $\frac{6}{4}$  is always the fifth to the fundamental chord; and the bass of 6, the third to the same. Those who are conversant in these studies, will always find much amusement in considering the nature and construction of the chords and inversions of the minor third, the ninth, eleventh, and thirteenth; and more especially of the fundamental discord chord of the minor seventh, which has of late attracted so much of the attention of eminent composers.

Example 1, opposite to letter (z 1) shews what is termed *anticipation*; because, the D in the bass being a crotchet and a half, the crotchet of its time, or duration, belongs to the notes B and C above; and the remaining quaver to D above, which has its half remaining to correspond to the quaver D below. Example 2, is generally called *suspension*. They are much the same in meaning, being, generally, anticipation in ascending, and suspension in descending. Example 3, is an instance of the combination of both characters.

We have, at length, arrived at the application of the new system of fingering (as amply described) to the compositions of various authors; and these illustrations will be occasionally given in the different compasses of the instrument, using the bass, *tenor*, and treble clefs, singly, and intermixed, in order to be able to play in them *at sight*.

Fingering in the tenor and violin compasses, may, if necessary, be postponed, till perfect readiness of execution, attended with a good position, tone, and bowing, is attained to, in moving in the eleven described positions close, and extended.

Example 1, is played in the lower compass. Example 2, the same tune, is played with different fingering, and with more refinement and expression, above the common position, which may be reckoned the *second position*. The 104th Psalm, composed by Handel, is added here, and is all, excepting a few notes, played in the second close position. Example 3, a beautiful Scotch tune, and one of the finest instances of the pathetic melody in that

original and captivating description of music, is fingered as low as possible, on the instrument. Example 4, is the same tune played in higher positions, always attended with more sweetness of tone, and a more pleasing, because a softer expression. Here the second part begins in a thumb-tenor-position, on the middle of the second string; and the whole of this part is played on the second string, excepting the turned shake, the four last notes, and the second close.

Let it once more be observed, and *well recollected*, that the tenor positions take their name from the situation of the thumb on the first, second, third, or fourth note, reckoning from the *middle of each string*; that the violin-positions take their appellation from the situation of the thumb on some note or other, including the twelfth major (*See Fig. 1.*) and all above it; and that the eleven positions of the lower compass, take, each, their number, or name, from the real or supposed position of the first finger.

Example 5, is the same tune played *in alto*, in three sharps. The example is begun by placing the thumb *harmonically* in the first violin position, or twelfth major on the second string. The dots on the left of the fingering, mean that the note may be *harmonically* played. This example carries the second finger as high up as C sharp; the seventeenth major, and the third finger a note higher, on the first string. In the third bar of the second part, the seventeenth major F sharp, on the second string, is touched *harmonically* by the fourth finger. With a little practice, playing in this high compass will be found as easy, and more so, than many passages in the lower compass. The notes must, as often as possible, be taken *harmonically*. At the end of Example 5, there is a duet-variation of that Air, by Mr. Binger noticed in the work. Example 6, is a very fine Sonata from Corelli, and is fingered in the lowest compass. The same sonata is repeated in Example 7, in order to contrast two different modes of fingering the same piece of music. In Example 6, the second, or common position, is used throughout, excepting in one place, where the hand is necessarily thrown back into the first position, in order to finger D sharp, and G sharp. The practice of Example 7, will give a considerable command in the lower compass, independent of the very superior, and very striking, difference of effect. The movement marked *allegro* plays more pleasingly as an *andante*. It must always be recollected, that the dot to the left of the figure marking the position, constantly means, an *extended position*, reckoning from the situation of the first finger, which marks the position, whether close or extended.

In the course of these illustrations, we shall give two of Corelli's most celebrated Concertos, as improving examples of fingering in all minor and flat keys. This renowned Musician died in 1713. His compositions are distinguished by the harmonious union of all the parts. His music is the language of nature, and was played with undiminished delight during fifty years, in all public places in Europe. His fine harmony, and elegant modulations, are deemed standards of taste; and the finest composers, up to the present times, estimate his works as the grammar and groundwork of their productions, however characterized by the modern rapidity of style and manner. The most distinguished musical writers, historians,



and poets, have celebrated the memory of Arcangelo Corelli, whose wonderful genius and talents will command admiration, while truth and nature constitute the just criterion of genuine taste.

Corelli's Solos and Sonatas would alone have established his fame. His Concertos are thought to preclude all criticism; being, in point of majesty, solemnity, and sublimity, deemed perfect, from the purity, richness, and fulness of the harmony, so judiciously arranged and disposed, as to make us almost forget that there can exist any music of a similar nature.

Number 8, is the highly admired Scotch air called "Lochabar," or the "Lake of woody Banks." The fingering here is mixed, and includes six of the positions applicable to this key. The accurate practice of this example will produce firmness and neatness of fingering slow passages in the key of G major.

Number 9, is a variation in the spirit of the same tune, by Mr. Binger, whose execution on the violin may be equalled, but cannot be surpassed. His talent for modulation is well known, and highly estimated. The fingering here, being principally in the common position, the situation of the hand is marked only where this position is quitted. F sharp is here fingered on the second string, with the third finger; but on the fourth string, as in bar 5th, it must be taken with the fourth finger. In the 2d Part, the turned shake is best made with the thumb, as marked, in the fifth position.

Number 10, is Lochabar set *in alto*, the first note G being the double octave of the third string. The notes marked *harmonically*, should be so played, as they are finer than the same notes obtained in the same place by stopping, or pressure. The octave, the twelfth major, the seventeenth and nineteenth major, are, on all the strings, very soft and melodious *harmonics*. Care must be taken to play, in this high compass of the instrument, with the hand held at right angles with the finger-board. For this purpose, the elbow must be somewhat raised; but without any constraint, or raising of the shoulders. The bow must be drawn, with great smoothness and steadiness, parallel to the bridge, two inches and three quarters from it. The Accompaniment of Number 10 is a very fine Obligato, or running bass, by Mr. Binger. This is intended for a Second Violoncello. It is an improving lesson of quick playing in the common position. The fingering is marked in general, without reference to strings, or position; because the hand remains in one situation throughout. When in this key, the F sharp is fingered on the fourth string, and a B on the second, or the octave F sharp follows on the second string, or is in the same bar, it will be found more ready and convenient to use the second, in preference to the third finger, as exemplified in the 2d bar of the 2d Part of this Accompaniment.

Number 11, is the celebrated Scotch air with which Tenducci so long charmed his hearers in the Hanover Square Rooms. It furnishes a good specimen of fingering in the positions of the lower compass incident to this key.—Number 12, is the same air set in the treble clef, and played (excepting a bar and a half at the beginning of the 2d Part)

in the tenor-pitch of the Violoncello. There is a great advantage in playing in the middle compass, as here; and it is, that so many notes can be taken in one position, on account of the closeness, or contiguity of the notes on this part of the instrument.

Number 13, is in two flats; and is the much-admired tune introduced in the Opera of the Duenna. It includes mixed bowing in the flat positions, from the first to the tenth; and carries the fourth finger a semi-tone above the middle of the first string. Positions 1, 2, 3, 5, 6, and 10, seem to be those, principally, required by this key.

Number 14, is a well-known Scotch air, which has been harmonized by eminent composers. Here the common positions are well exemplified; and the thumb, in two instances, acts in a tenor-position, to shew the union of the higher, common, and tenor-positions. The 2d Part commences with the thumb in the tenth position, second string; and the hand descends from that, to the seventh position, at note A, on the same string.

Number 15, is Haydn's favourite Scotch tune; and furnishes improving exercise in the middle and higher positions. In the last bar but one, of the 2d Part, the thumb acts in the second tenor-position, on the second string, carrying the second finger to G, the eleventh major on that string. The treble clef is blended with the bass clef in the three last examples, to render such practice familiar; for young players, merely from want of such habit, are frequently quite appalled by the very appearance of the treble clef, which is readily mastered by such early practice as is here recommended.

Number 16, contains two fine running modulated variations on this tune, by Mr. Binger. Being chiefly in the common position, it was unnecessary to mark the fingering throughout. These variations carry the third finger to D, the last note in the tenor-position, first string. This example affords good practice in running, or unbroken bars. It requires some little attention, at first, to execute the intermixture of slurring and staccatoing, requisite to give the expression in similar passages.

Number 17, is a very favourite simple Ballad, entirely in the treble clef, and executed throughout with the thumb placed in the tenth position of the second and first strings. With due attention to the differing distances of the notes, the same example may be played, with similar fingering, in any other key, with the thumb on any other note above this position, or, indeed, on any position, above the fifth inclusive.

Number 18, principally, in the tenor clef, is the fourth Sonata of Breval. It displays the fingering of quick passages in the lower compass, and towards the tenor-pitch. At A, the note D, though an octave above the two preceding notes of the same name, may be played *harmonically there*, without moving the first finger. At B, the chords, as marked, may be fingered in two places. The sonata concludes with the popular air of "God save the King," beautifully harmonized. The fingering of the tune has been carried into the tenor-pitch, in order to vary the exemplification. A single figure for each note of the double stops, sufficiently indicates their positions, given in this first instance of double stops, in the lower compass of the instrument. It may not be generally known,

that the simple melody of this air was published at Aberdeen, in a book of Anthems, in 1682.—Following number 18, is a Scotch Reel, which, with similar ones, will tend to steady the hand in the lower compass.

Number 19, is the Third Concerto of Corelli, in the key of C minor. It is, probably, the most difficult to finger with accuracy and precision; and, therefore, the mode of taking every note is figured. By playing this fine concerto accurately, the practice of flat, and minor keys will become greatly facilitated. In general, playing low down, in a flat key, has not a good effect, as is well known by those who understand the nature of the Violoncello. On this account, the fingering is kept near to, and in, the middle compass, and different modes of taking the same passage are marked; but it is recommended to follow the higher mode. This Concerto and the Eighth, were played at the Pantheon in Italy, annually, for many years, in commemoration of the distinguished Composer. In all these examples it will be necessary to play only a few times, with *strict attention* to the fingering marked; as such an impression will be made on the memory, that the passages will very soon be taken nearly as figured; and the hand will be found to move from one position to another, with a degree of satisfaction proportioned to the smoothness and facility of execution. In counting the *rest of eight bars*, previous to the allegro, *count each four bars mentally; one, two, three, for each bar*; the foot going down with *one*, and rising with *three*, for every bar. Begin counting, on hearing the first note of the leading instrument.

The practice of the Third Concerto will lead to the next number, which is the celebrated Eleventh, containing the finest rapid obligato solo that, perhaps, was ever composed. The playing of rapid passages, or running basses in flat keys, in the first and second positions, ought to be avoided as much as possible; on account of the jargon, or cackling noise, produced there, by the interference of imperfect harmonics near this end of the strings, with the notes intended to be stopped. The bow of a young player is apt to take the string *before* the note is pressed down: the consequence of this will invariably be, that an imperfect *harmonic*, or a sort of shriek, will precede the intended note, unless great care is taken to press firm with the finger used, previously to the action of the bow. Independent of all this, the notes and half-notes at this extremity of the strings are inferior, in softness and tone, to the same taken in a higher position. From these weighty considerations, this far-famed Concerto is fingered in the higher positions, the *handling* of which, under every possible advantage of tone, flow, and effect, will be found easier than that of the lowest positions; because the notes lie closer and more contiguous, and occasion a less constrained extension of the fingers. The Concerto must be played slow, till the taking of the successive positions, as marked, is perfectly attained to.—Passages of demi-semi-quavers, must, however, be frequently played in the two lowest positions, because there is scarcely time for shifting the hand to more eligible positions.

Nothing can be better calculated than this Concerto, for training the hand, and giving smoothness, firmness, and decision to the action of the bow, on which so much depends. To express the *accent*, groupes of four notes are fingered in succession.

Number 21, is a fine Air from Handel, in a difficult key of four sharps. For the reasons last mentioned, fingering in the lowest positions is avoided. Towards the situation of the *adagio*, there are two bars fingered in the lowest positions, merely to shew that they are as much as possible to be avoided. The playing of this air with tolerable success, will require considerable pains, and a minute attention to the taking of the positions in tune, with a corresponding accuracy in the movements of the bow.

Beginners find it rather difficult to slur notes in quick time, more especially when they run in *arpeggio* style, from string to string. Much of this requisite slurring is, purposely, introduced in the present example, as such practice is frequently necessary where smoothness of execution is indispensable. Annexed to this Number 21, is Fischer's famous Minuet, in the treble clef, in order to combine the tenor-pitch with the whole extent of the lower compass.

Number 22, contains the Slow movement, and the Obligato passage, of Correlli's First Concerto. The slow movement must be played with a lengthened bow, and a considerable motion of the arm. There are eight quavers in a bar. A vibration of a line and plummet, twenty-four inches in length from the point of suspension to the middle of the plummet, will be nearly equal to one of these quavers in time. The bow must not remain on the string during the whole vibration; but still, the movements of the bow, in each direction, must be quite equal; so that the half of the time of each quaver is sounded, and the other half reckoned. Many, however, play each quaver its full length on the string; but the former mode does more justice to the author, and renders the first violin more prominent. In these instances, crotchets, minims, and semibreves, must be played, or sounded, their exact time.

This rapid obligato passage can certainly be fingered in the lower positions, and others approximating towards the middle of the strings. The execution of the portion of it in the tenor clef, is exemplified nearly in the tenor-position, on two strings; in order to shew, that, with a little practice, the execution with the thumb in the tenor-pitch, is more neat and ready, than a more troublesome variety of shiftings of the hand among the lower positions. Where the bass clef succeeds the tenor clef, were the hand to remain in the tenor-pitch, it would be necessary to play the notes E and F, as often as they occurred, on the fourth string. These two notes are harsh on that string; and, therefore, the hand descends, to finish the passage in the lower positions. The conclusion of this difficult obligato being similar to this commencement, the fingering there is not repeated in the tenor-pitch, but, for variety's sake, is exemplified in the lower compass. This solo demands spirited and decided bowing, entirely from the action of the wrist; and, therefore, any attempt at rapid execution for a considerable time, will defeat every intended purpose. It must not be got by heart: for the eye, the finger, and the bow, must take up every note in rapid succession. Any person who can play this moving bass with accuracy, and with an expressive tone, will be entitled to think favourably of his own execution.

Number 23, is a Minuetto movement, with a Vivace, from an Overture of Haydn.

The fingering might have been given in a lower compass; but it was deemed more eligible to exemplify a minor key in the higher positions, where the tones are unquestionably softer, and more pleasing. As has been already remarked, the same fingering will be found equally applicable to the similar positions above and below: but it is far from being asserted, that the effect to be produced is equal in either. The practice of this example will give a great command of the hand in all the flat and minor keys.

Number 24, is a March from the *Scipio* of Handel. It is to be played after Pleyel's German Hymn, and is intended as an improving instance of the practice of double stops, which are exemplified, on purpose, in the various leading positions of the lower compass. It is to be recollected, that the three highest figures refer to the highest note, and the three under to the lower of the double notes. The figure on the left, means the finger: the middle figure means the position; and the figure on the right, the string. When a double stop has been once figured fully, where it occurs again, the figures of the fingers are deemed sufficient. The bar marked A, can have the three last notes played properly by placing the thumb on A, fourth string; the first finger on G, third string; and the third finger on E, in second octave, fourth string. The fingering at B, must be nearly similar, with the thumb either in the ninth position, fourth string; or in the second position, third string. This example should be assiduously practised, as it will tend to render familiar the taking of double positions throughout the lower compass of the instrument.

It may be proper here to make a few remarks on the order in which the sharp and flat keys run. The sharp keys run by consecutive fifths, each increasing by one sharp: as, C—G with one sharp—D, two sharps—A, three sharps—E, four sharps—B, five sharps—F, six sharps—and C, seven sharps. The flat keys rise by consecutive fourths, beginning with the fourth of the natural key: as F, with one flat—B, two flats—E, three flats—A, four flats—and D, five flats. These are the twelve keys of the major mode.—To render these flat keys minor, the third, sixth, and seventh, are lowered a semi-tone; or, in other words, three flats are added to each in their order. The natural key of C is made minor by giving it three flats, B, E, and A. The key of A is made minor, by taking away the three sharps. D with two sharps is rendered minor, by taking away the two sharps, and adding one flat. G sharp is made minor by taking away the sharp, and adding two flats. All the other major sharp keys are made minor by deducting three sharps. The keys of the minor mode which appear with flats, rise by consecutive fourths from A minor, which appears natural:—A—D with one flat—G, two flats—C, three flats—F, four flats—B, five flats—E, six flats—A, seven flats. The minor keys which appear with sharps rise by successive fifths:—E minor, one sharp—B, two sharps—F, three sharps, and C four sharps. These together make the twelve scales of the minor mode. This enumeration may aid young players who may be apt to mistake the nature of the various notation of the major and minor modes.

Number 25, is a good, and moderately difficult specimen of fingering in every compass of the instrument; and the transitions are in extremes: for at C, the fifteenth, seventeenth,

and nineteenth-major notes (*all fine harmonics*) are taken with the thumb, first and second fingers; and a descent of four octaves and a third is *immediately* made to C sharp, the *lowest* semi-tone of the fourth string. There are, generally, more modes than one, of playing almost every passage in general, and in solos particularly. For instance, at A, the bar is played in one position of the hand, by taking four notes on each string. The same passage, with more shew of execution, might be run down all on the first string, excepting the concluding note G. It might be played on the first and second strings together: it might be played, entirely, on the second string, beginning on the harmonic nineteenth major: it might be played on the second and third strings. This sufficiently evinces how cautiously opinions on fingering ought to be given, before the subject is duly considered.—At B, a variety of fingering in descending solo passages, is exhibited, down to the open note of the second string. Where there are repetitions, the fingering is not again figured; and where the hand remains in *alto*, in the first violin-position, the figures indicating the thumb and fingers, are deemed sufficient. In playing these solo-concertos, the bowing is bold, spirited, and decided: but not so in accompaniments, where delicacy and softness of playing are required, as the reverse would overpower the modulations of a flexible voice, or destroy the effect of the fine tones of the violin, and wind instruments. This is so common an error, that the Violoncello performer should, as a constant *memento*, mark the word PIANO on his instrument.

We have thus conducted the exemplification of the fingering system recommended, to a close, (and be it understood) without meaning to convey any reflection on modes now in use. It is the nature of all human sciences to be approximating to a perfection, or maximum, to which they never attain; and future ages may surpass the present, in this and every other species of knowledge, in the same proportion that the barbarism and ignorance of the middle ages have been succeeded by the civilization and refinements of modern times. Whether a link has been added to the general chain of knowledge, the intelligent reader will decide. If he already knew most, or all, of what is here written, we shall be sorry that nothing better can be offered. The work may, however, incite him to a farther pursuit of this interesting subject; and to a numerous class of young players, it may prove beneficial.

As some very fine notes may be, occasionally, taken in the fourth octave of the Violoncello, these examples conclude with the Air of "God save the King" (on account of the distinctness of the notes), set in a key corresponding to each of the four strings. The fingering is affixed to the air commencing on the lowest note, G, of the fourth octave of the third string. The notes lie so close to each other, that the same finger is used for successive notes. The tune is all included within the octave, excepting one note, marked *above* with a ×. This note is the one immediately under the fourth octave; and is the harmonic twenty-first from the open string. It is flatter than the common diatonic scale admits of. In Examples 2d, 3d, and 4th, it must be played *harmonically* on the string immediately



above, where it is the seventeenth major on such string. In the 4th Example, it is B, the seventeenth major, and is taken on the third string. The notes, thus played, will be C sharp on the first string; F sharp on the second string; and B natural on the third string. In Example 1st, the note marked +, is G sharp; whereas the twenty-first on that string is G natural, somewhat flat. On this account, the G wanted, must be taken as the fourth of the fourth octave of the second string. The fourths and sixths of this octave are a little sharper than the present temperament, but not so much so as greatly to offend a cultivated ear. Its seventh minor is also a little flatter than in the common scales. These examples are, probably, matters more of musical curiosity than of much utility; but still, as many of the altissimo notes enter into brilliant solo-concertos, it has been thought eligible to state them, thus, distinctly. With a little practice, and attention, the air fingered may be accurately played, and this will give a facility of command in the contiguous altissimo octaves. We conclude with a few hints, and directions for an eligible course of practice. The instrument ought not to be attempted without the aid of a master. Let perfect accuracy of position, finger and bow, be acquired, in ascending and descending the scale under D. Let the mode of fingering the lower positions, in a natural, sharp, and flat key be practised: see E, H, I. Let the tenor and treble clefs be explained; as under letters J, K, and L. The scholar will carefully examine each article from (h), the time-table, to (t) inclusive. Run up and down the fourth, and two last unnumbered Examples of the scale under capital letter O. Play Example 1. Practise Example 1st, under O. Play Example 2, "God save the King." Finger the Scale-Examples 2d and 3d, under O; and the two first Examples in the same key, under U. Examples 6 and 7, and all similar sonatas of Corelli, may be next taken. Examples 8, 9, the second Violoncello part of 10, Examples 11, 15, and 16, may follow. The Scale-Examples, from letter P to (g) inclusive, are to be practised *assiduously*: and though some difficult passages may occur in them, it is better to *encounter* and *conquer* them *deliberately*, than to be liable to be appalled, by their *sudden appearance*, when unprepared for them. Corelli's Sonatas, may, for a time, be played, to secure good execution in the 1st, 2d, and 3d positions. The most pleasing are the 1st, 3d, 5th, 7th, and 13th, Opera II; and the 1st, 3d, 5th, 7th, and 8th of Opera IV. They are all improving: but the 1st and 3d Sets were composed for the church more than the chamber. Examples 3, 4, and the variations under them; Example 17 (thumb in 10th position), and Example 18, principally, in the tenor clef, may follow. Corelli's Sonatas, accompanied by a first and second Violin, may be persevered in till played in time, tone, and tune. Corelli's Concertos, as exemplified, are now to be entered on, to be played first by two Violoncellos; then, by a Violoncello and a good Violin; and lastly in concert of seven instruments. Handel's Overtures, Concertos, and such compositions, may follow in a similar manner; and Examples in difficult keys, and double stops, as 21, 23, and 24. Example 12, in the tenor-pitch, excepting two bars, will be a good preparation for playing the examples given in alto, and altissimo. The examples in different keys of Scotch tunes, such as 13 and 14,

will lead to very pleasing practice in that style, which will give a ready command in the treble clef. Solo-playing will be now arrived at; and Example 25, and the four specimens in the fourth octave, will be a good preparation for this highest description of execution. The modern style will be acquired by joining, frequently, in playing the works of Haydn, Beethoven, Mozart, and Pleyel. Lindley's, Schetky's, Breval's, and Schonebeck's duets, are useful and improving practice, for playing with precise accuracy and distinctness, and without *dragging*, in slow time. Real good playing is to be found in the eleven lower positions of this fine instrument; though execution in other compasses, have their distinct merit. Rules and examples, founded on a sound *rationale*, aid powerfully; but he who has studied the genius of the instrument will, in time, learn *to be a rule to himself*.