

PRACTICAL
INSTRUMENTATION

BY

RICHARD HOFMANN.

TRANSLATED BY

ROBIN H. LEGGE.



PART VII.

**HARP, MANDOLINE, ZITHER, GUITAR, PIANO (CEMBALO),
CIMBAL, ORGAN AND HARMONIUM.**



LONDON
AUGENER & C^o.



NEW YORK
G. SCHIRMER.

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Part VII.

Harp, Mandoline, Zither, Guitar, Piano (Cembalo), Cymbal, Organ and Harmonium.

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PART VII.

The Harp.

The harp, which is found among orchestral instruments in very old music, has been vastly improved in recent times, and is now very much employed both as solo and orchestral instrument. Before describing the present harp, a few words may be said as to the old kind. This was somewhat similar in shape to that now in use, and had 30 or more strings tuned diatonically, the tones generally belonging to the scale of *C*. Its compass, according to the number of strings, exceeded 4 octaves from *C* to $\underline{\underline{d}}$; all semi-tones could only be played by turning a small nut at the upper end of the harp. To play in any other key than *C*, in which this harp was tuned, the strings had to be tightened or loosened, which always demanded a certain amount of time. In this form the harp existed till 1720. It was used in Handel's *Esther* and in Gluck's *Orfeo* (though each must have known of the existence of a better harp); at that period the harp part was written on one line in the violin clef, and used in a very primitive fashion; thus:

Gluck, 'Orfeo', Chor, No. 19. Peters Edition.

Andante.

Arpa.

Violino I & II
&
Viola.

Violoncello
&
Contrabasso.

Solo and Chor, No. 22.

Un poco lento.

Aria No. 24. 'Tausend Qualen.'

Un poco lento.

Strings. or. pizz.

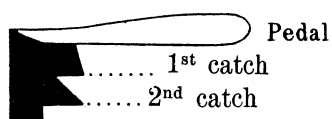
In a similar way the aria, No. 26, is treated for harp and strings.

At a later period this harp-part was written on two lines in both clefs, in the simplest manner, as in Exs. in score 1 and 4.

From the old harp was developed the *Pedal harp* the invention of Hochbrucker in 1720. In this by depressing with the foot one of the 7 pedals affixed to the lower end of the harp, any note could be raised a semi-tone. Thus the old time-losing harp became obsolete, and a player could use various keys with ease. These pedal harps had a compass from the low *f* or *a* to $\underline{\underline{d}}$, diatonically tuned; but they were in *E^b*, not in *C*. The keys *C^b* or *B*, *G^b* or *F[#]*; *D^b* or *C[#]*; and *A^b* were not playable because of the simplicity of construction of the instrument.

These harps, again, disappeared on the appearance of an improvement in 1820, made by Erard of Paris, and called by him the Double-Pedal harp. The perfecting of this instrument lay in its greatly improved mechanism, in that by means of the 7 pedals the strings could be raised in pitch not one, but two semi-tones.

The following illustrates such a pedal with double depression:

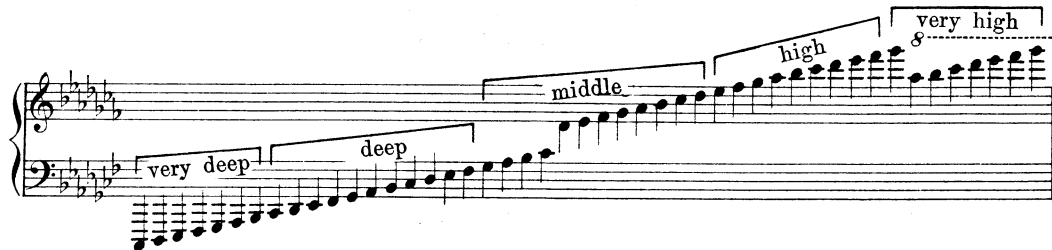


For a brief space the pedal can be held down with the foot, but for a longer period, it is inserted under one or other of the two catches.

This harp has 46—47 strings, tuned diatonically in the C^2 scale, and has a compass of over 6 octaves from low C^2 to g^2 ; thus:



Its whole compass with registers is



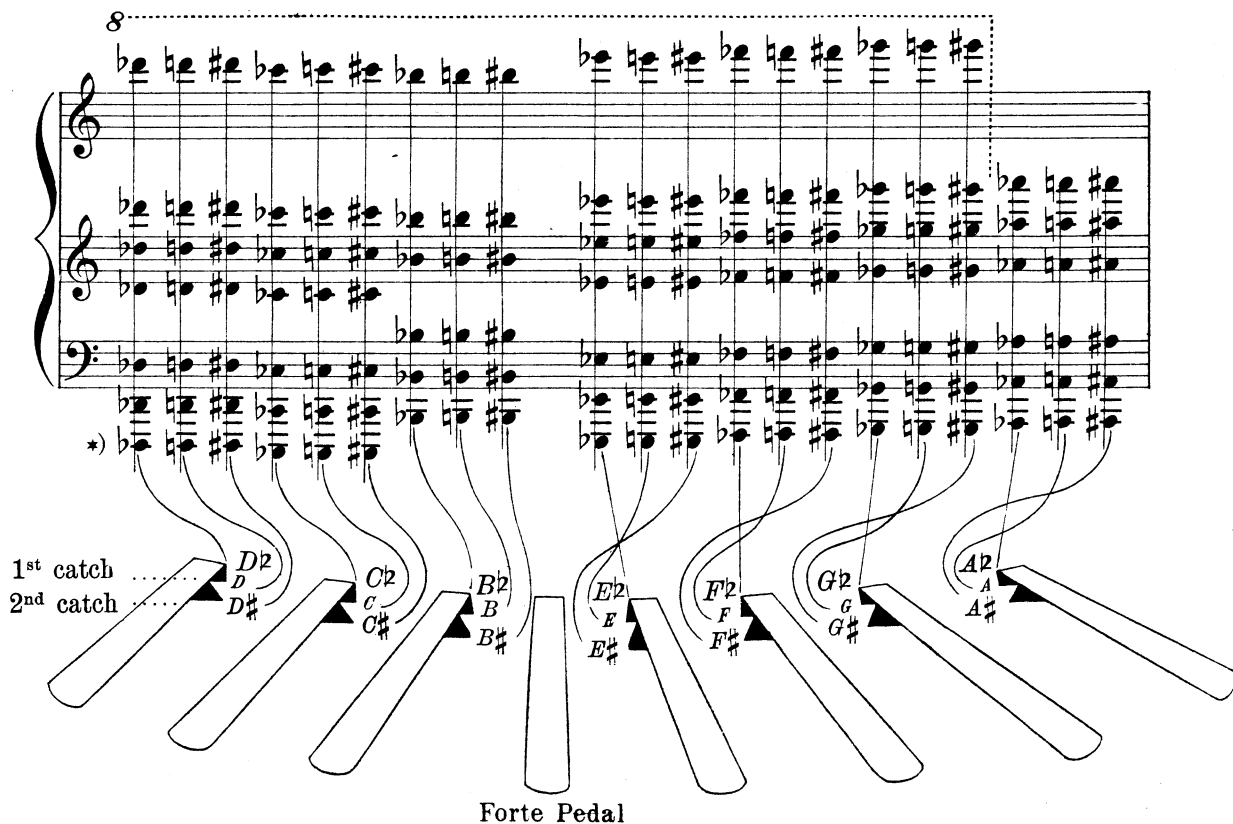
With chromatic intervals by means of the pedals.

The tone-colour of the harp is somewhat similar throughout its entire compass, yet each register differs in character from the others; thus, e. g. the two lower registers are tender and full: the medium clear but not full: the high is harder, and the highest very sharp.

The strings are plucked by the fingers of both hands, though the little fingers are not used. Two lines are used for its music, like the pianoforte, and the bass and violin clefs are also used.

As already stated, the 7 or 8 pedals are used by both feet. The left takes 3, the right 4. The 8th pedal, which is for forte, and is placed in the centre, is only depressed by the left foot, and used for especial effect in solos.

The following shows the pedals and their effect on the strings, when placed in either catch. It may serve also to show what is easy and what difficult.



*) The deepest notes of the D^2 pedal, lower d and d^2 , and of C^2 pedal, C and D^2 are unplayable.

The first depression of a pedal raises the pitch of all octaves in which this particular tone occurs. If, e. g., the pedal $F\flat$ is pressed to the 1st catch, all $F\flat$ s on the harp become F s, and the whole strings become tuned in $g\flat$. If the pedal $C\flat$ is pressed into the same catch C , the strings are tuned to $D\flat$. If this proceeding were adopted throughout the 7 pedals, the harp would be in C and not $C\flat$.

The following should be studied.

	Original pitch of the pedals	$D\flat$,	$C\flat$,	$B\flat$,	$E\flat$,	$F\flat$,	$G\flat$,	$A\flat$.	
By depressing pedal $F\flat$ to 1 st catch	$\natural f$	.	.	the harp stands in $G\flat$.
" " " $C\flat$ " " "	.	$\natural e$	.	.	.	.	.	.	" " " " $D\flat$.
" " " $G\flat$ " " "	$\natural g$	.	.	" " " " $A\flat$.
" " " $D\flat$ " " "	$\natural d$	.	.	.	.	.	.	.	" " " " $E\flat$.
" " " $A\flat$ " " "	$\natural a$	.	" " " " $B\flat$.
" " " $E\flat$ " " "	.	.	.	$\natural e$	.	.	.	.	" " " " F .
" " " $B\flat$ " " "	.	.	$\flat b$	.	.	.	.	.	" " " " C .

When all the pedals are at rest in the 1st catch, and as has been shown, it is easy to play in the flat keys, a further change may be made to show a similar mode of arranging for the sharp keys by means of the pedals.

If Pedal F (1st catch) be depressed to the 2nd catch, we obtain $F\sharp$, and the strings, formerly in C , are now in G . When Pedal C is depressed to the 2nd catch, the harp is in D .

The following table shows the use of the pedals when they are in the 2nd catch.

	Original pitch of the pedals	$D\flat$,	$C\flat$,	$B\flat$,	$E\flat$,	$F\flat$,	$G\flat$,	$A\flat$.	
	1 st catch of the pedals	D ,	C ,	B ,	E ,	F ,	G ,	A .	
By depressing pedal F (1 st catch) to 2 nd catch	.	.	.	.	.	$\sharp f\sharp$	.	.	the harp stands in G .
" " " C (" ") " " "	.	$\sharp c\sharp$	.	.	.	.	.	.	" " " " D .
" " " G (" ") " " "	$\sharp g\sharp$	.	.	" " " " A .
" " " D (" ") " " "	$\sharp d\sharp$	.	.	.	.	.	.	.	" " " " E .
" " " A (" ") " " "	$\sharp a\sharp$	.	" " " " B .
" " " E (" ") " " "	.	.	.	$\sharp e\sharp$	.	.	.	.	" " " " $F\flat$.
" " " B (" ") " " "	.	.	$\sharp b\sharp$	.	.	.	.	.	" " " " $C\flat$.

Since this harp can thus play easily in all keys, all diatonic progressions with one or both hands in any tempo are playable. Yet it is always easier for the harpist to play in flat than in sharp keys. The former have a more beautiful tone and are purer in intonation. Major scales can be played *glissando* through 1 to 6 octaves, and in the proper place are of especial charm.

The melodic minor with its sharp 6th and 7th upwards is nearly always only playable by using several pedals, wherefore minor scales are difficult.

Chromatic passages are only playable slowly, and even then are not of particularly good effect. An interposed chromatic interval in a diatonic passage often creates a difficulty: thus

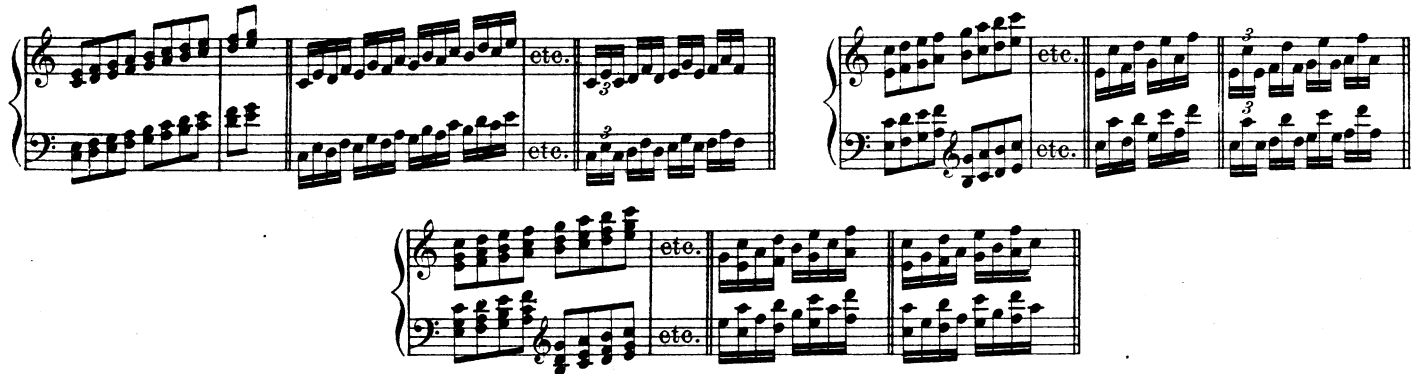


and still more difficult would be runs with several such notes. In broken chords, however, such a note may be easily played, thus:



Chords which do not extend beyond an octave are easily played broken with one hand. On the other hand chords of more than an octave are not so easy to sound together as broken chords. If broken chords are to be played, the sign $\{$ (as on the piano) must be used; but dots are used if the chords are not to be broken.

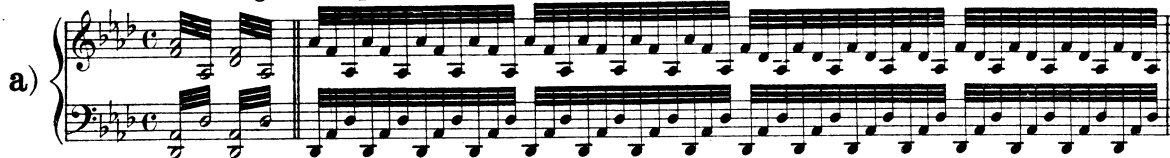
The following notation of 3^{rds}, 6^{ths} and chords of the 6th, as well as some others, are playable by the fingers of either hand, or with both hands as noted, in any tempo and key. But such progressions when chromatic are unplayable.



Modulations quickly introduced and to remote keys are generally difficult because of the need for depressing and catching of two or more pedals with exceeding great rapidity; the player can only depress one pedal at a time with each foot. But such modulations as are transitory and require little use of the pedals are not difficult.

The tremolo can be played thus on a harp:

Method of writing. Of performance.



Method of writing. Of performance.



Shakes are possible on notes produced from two adjacent strings. They can be executed with one or both hands alternately; thus:

For one hand.



For two hands.



Such other ornaments as the appoggiatura are also possible.

The repeated plucking of one string in very rapid tempo (a sort of tremolo) is only possible when two adjacent strings are tuned together by means of the pedal.

On the double-pedal harp all tones except *D*, *G* and *A* can be played simultaneously on two adjacent strings with the aid of the pedals. These are:



*) Pedal $D\flat$ $C\flat$ $E\flat$ $D\flat$ $F\flat$ $E\flat$ $F\flat$ $E\flat$ $G\flat$ $F\flat$ $A\flat$ $G\flat$ $B\flat$ $A\flat$ $C\flat$ $B\flat$ $C\flat$ $B\flat$

0 2 0 2 0 1 1 2 0 2 0 2 0 2 0 1 1 2

From this it will be seen that the alteration of pitch of the one note implies an alteration of the whole string. By such manipulation the harp can be tuned in various chords, which can be used in the most highly effective manner, thus: Dominant 7th chord:

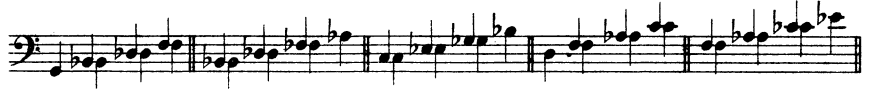


*) The names $D\flat$, $C\flat$ etc. denote the original pitch of the strings without the pedals; the 0 is open string; the numbers the catches).

Chord of the 7th on the 2nd step
in the major:



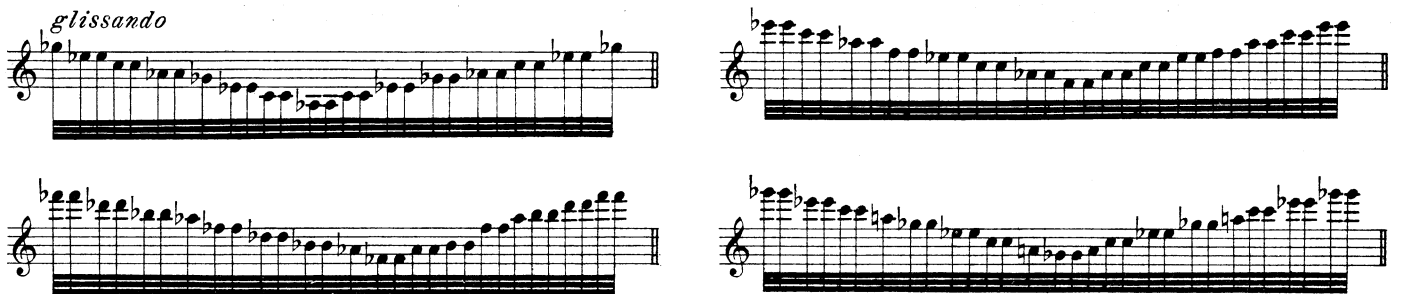
Chord of the 7th on the 7th step
in the major:



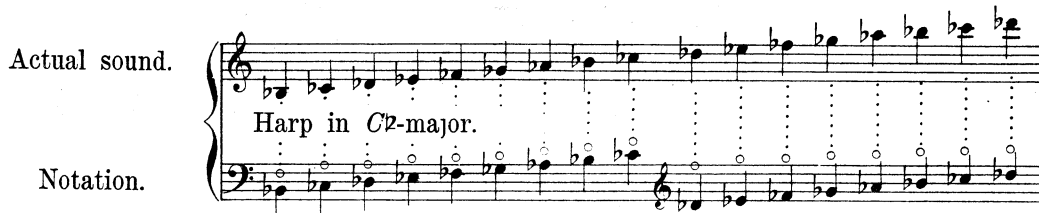
Diminished 7th :



These chords can be produced thus:



Harmonics sound best in the upper and middle registers. They are thus described — o — over the notes. Since these are not easy on all the strings alike, it may be noted that none are difficult between *B* and *d* in the scale. The following shows the notation and actual sound:



Rapid successions of harmonics are very difficult; but double harmonics are playable with two hands in not too rapid a tempo. Muted notes are rarely used; they are marked \oplus or $*$.

Guitar tones (sons d'ouglas) are produced by the player plucking the strings close to the sounding-board with the finger-nails.

In the orchestra the harp is generally used only for accompaniments or decorative purposes in spite of the great use that might be made of it. As a solo instrument or for accompanying a solo it is invaluable.

The following should be studied: **Parish Alvars**, op. 58.

Parish Alvars, op. 81. Concerto for harp and orchestra.

Reinecke, Concerto for harp with orchestra. Op. 182.

Schüecker, op. 11 and op. 12.

The tone of a harp unites well with the voice, pianoforte, organ, harmonium, strings, wood or brass. The following examples in score show its various, and most effective uses.

Examples in score^a.

1. Méhul, From 'Joseph', No. 11. Song of the Maidens of Memphis.

Allegro moderato.

Clarinetto in C.

Arpa. *

Violino I.

Violino II.

Viola.

Chor of Maidens.

Violoncello & Contrabasso.

Lobt den Herrn mit Saitenspiel und Har - fen! Gross ist der

dolce

Herr, Is - ra - els Gott, e-wigwäh-rend ist sei - ne Gna - - - - de und stark sei - ne
e - - - wig - wäh-rend ist sei - ne Gna - de

Beethoven uses the harp in *Prometheus*, but nowhere else! LEONORA PROHASKA.

*) The harp part is placed in a score immediately over the strings (see p. 33): though many composers have placed it elsewhere.

2. Mendelssohn, 'Antigone of Sophocles'. Chor. I.

Maestoso.

Flauti. *ob. p*

Violino I. *Clar. p*

Violino II. *Trombl. p*

Viola. *3 Cor. mf p*

Male Chor. *Ten. III. Bass III. mf*

Arpa. *mf*

Violoncello & Contrabasso. *Tromb. Fag. a. 2.*

Ü - ber un - se - rem Dach um - gähnt er den sie - ben - tho - ri - gen

cresc.

Mund und blut - lech - zen - den Spee - ren rings und floh, e - he mit un - serm

cresc.

cresc.

cresc.

cresc.

dim.

Blut er voll Gier - de den Schlund fül - - len mocht' und e - he der Thürm Um - - krän - zung tilgt

dim.

dim.

dim.

dim.

dim.

p

p

p

Oboi.

Heuss, Himmel, deinen Thau hernieder, dass ihren Heiland sich die Erde zeugt!

Detailed description: This musical score features an Oboe part at the top with a melodic line and dynamic markings of *pp*. Below it are two staves for strings (Violino I and Violino II) with a rhythmic accompaniment. At the bottom, a vocal line is written in German with lyrics: "Heuss, Himmel, deinen Thau hernieder, dass ihren Heiland sich die Erde zeugt!". The music is in a minor key and 4/4 time.

7. Gounod, 'Faust', Act II. (Garden scene.)

Andante.

Corno in F.

Arpa.

Violino I.

Violino II.

Mephistopheles.

Viola.

Violoncello.

O Nacht, breit ü - ber sie den

Detailed description: This score is for Act II of Gounod's 'Faust', titled 'Garden scene'. It is marked 'Andante'. The instruments listed are Corno in F, Arpa, Violino I, Violino II, Mephistopheles (bassoon), Viola, and Violoncello. The vocal line for Mephistopheles has the lyrics: "O Nacht, breit ü - ber sie den". The music is in 8/8 time and a minor key.

8. Rossini, 'Othello', Act III. Ritornello.

Arpa.

Streichinstr.

D. & F. 7

Detailed description: This score is for the Ritornello from Act III of Rossini's 'Othello'. It features an Arpa (harp) part with a rhythmic accompaniment and a string section (Streichinstr.) with a melodic line. The music is in 2/4 time and a minor key. The page number 'D. & F. 7' is printed at the bottom.

Piano accompaniment for the Bacchanale section, consisting of two systems of grand staff notation (treble and bass clefs). The first system features a complex, rhythmic melody in the right hand and a supporting bass line in the left hand. The second system continues the piece with similar textures, including a trill (tr) and a forte (f) dynamic marking in the right hand.

9. Meyerbeer, 'Le Prophete', Act V. Bacchanale.

Orchestral score for Meyerbeer's 'Le Prophete', Act V. Bacchanale. The score includes parts for Flauto picc., Flauti, Oboe I., Clarinet. I. in B \flat , Corno in E \flat , Trombi in E \flat , Triangolo, Arpa, and Violino I & II. The music is in 6/8 time and features two first endings. Dynamic markings include piano (p) and pizzicato (pizz.). Specific instrumentations are noted as 'Cor III & IV. in B \flat basso' and 'Viol. II & Viola'.

10. Ambroise Thomas, Overture to 'Mignon'.

Orchestral score for Ambroise Thomas' Overture to 'Mignon'. The score includes parts for Clarinet. I. in B \flat , Arpa, Violino I & II, and Viola & Violoncello. The tempo is marked 'Moderato sostenuto'. The music is in 3/4 time and features dynamic markings such as forte (f), crescendo (cresc.), decrescendo (dim.), piano (p), and pianissimo (pp). A rehearsal mark 'D. & F. 7' is present at the bottom.

12 **II. Georges Bizet, 'Carmen'. Prelude to Act III.**
Andantino quasi Allegretto.

Flauto. *pp*

Arpa. *pp*

12. **Ambroise Thomas, Overture to 'Mignon'.**
Andante.

Corno I. in E \flat . *p* *sf*

Arpa. *pp* *sf* *pp*

Viola. *p* *pp*

Violoncello. *p* *pp*

Contrabasso. *p* *pp* *sf*

13. **Meyerbeer, 'Les Huguenots', Act II.** (By permission of Breitkopf & Härtel Leipzig.)

Arpa. *marc.*

Violino I. *pizz.* *arco* *pp*

Violino II. *pizz.* *arco*

Viola. *pizz.* *arco*

Margareta. *arco*

Violoncello & Contrabasso. *pizz.* *arco*

O schönes Land, — Land der Tou-rai - ne, ihr lachenden Au'n, du frischer Quell — sanfter Bach — leis hin-

14. **Meyerbeer, 'Robert the Devil', Act IV.** (By permission of Schlesinger, Berlin.)

Corno inglese. *marc.*

Arpa. *f* *pp*

Isabella. *pp*

Ro-bert, Ro-bert, mein Ge - lieb - ter, mein

15. Wagner, 'Lohengrin'. (Scene II.)

Ein wenig belebt.

Flauto I. *pp*

Flauto II & III. *p*

Oboi. *p*

Corno inglese. *p*

Violino I. *pp*

Violino II. *pp*

Elsa. *pp*
nahte da, so tu - - gend-li - cher Rei - ne ich kei - - nen noch er-

Arpa. *pp*

*) Tromb. I and Clar. enter in the last bars.)

16. Liszt, Hungaria Rhapsody, No. 2.

Andante.

Flauti. *p dolce con grazia*

Clarinetti in B \flat . *p*

Fagotti. *p*

Corni in F. *pp*

Arpa. *p*

Violino I. *pizz.*

Violino II. *pizz.*

Viola. *p*

Violoncello. *p div.*

Contrabasso. *p*

sah ein gol - den Horn zur Hüf - ten Ge -

A musical score for piano and orchestra. The piano part is written in a grand staff (treble and bass clefs). The orchestra part includes strings (Violino I, Violino II, Viola, Violoncello & Contrabasso) and woodwinds (Flauto & Clarinetto). The score features complex harmonic textures with many chords and arpeggios, particularly in the piano part. The key signature has two flats, and the time signature is 3/4.

The use of Harmonics.

17. Boildieu. 'La Dame Blanche'.
 Moderato.

A musical score for the opera 'La Dame Blanche' by Boieldieu. It features vocal soloists Jenny (Soprano) and Dickson (Tenor), and a full orchestra. The piano part is written in a grand staff. The vocal parts have lyrics in German. The score includes various instruments: Flauto & Clarinetto, Arpa, Violino I, Violino II, Viola, Cor., and Violoncello & Contrabasso. The key signature has two flats, and the time signature is 3/4. The tempo is marked 'Moderato'. Dynamics include *pp* (pianissimo) and *ppp* (pianississimo).

Jenny (Sopr.)
 Dickson (Ten.)

Die weisse Da - me kann euch hö - ren, die weisse Da - me sieht mich an.
 Dickson. (Ten.) Die weisse Da - me kann uns hö - ren, die weisse Dame sieht

At the end of this number harmonics are again used.

18. Fr. Liszt, 'Faust-Symphony'. (Mov. II, Gretchen, close.)

Flauti. *pp*

Oboi. *pp*

Clarineti in C. *pp*

Arpa. (Harmoniques)

Violino I. *ppp* *dreifach*

Violino II. *ppp*

Viola. *pp* *Solo*

Violoncello. *ppp* *Solo*

(See Berlioz 'Faust', valse.)

The Mandoline

hails from southern Europe, where it is used to accompany songs. As its strings are tuned like those of the violin, the accompaniment generally moves over or among the voice parts. Although it is rarely found in orchestral compositions, yet it is sometimes used with great effect. Its music is written in the violin clef on one line. It exists in various tunings according to the number of strings.

The 4 strings, German system, thus:

the Milan 6 strings, thus:

the Neapolitan, 8 strings, double, thus:

Spanish, 12 strings, double:

The particular instrument referred to in the following examples is that with 4 or 8 strings. Its compass extends over two octaves:

The mandoline is held like a guitar, the 4 fingers of the left hand gripping the strings, and in the right hand is held a piece of tortoise-shell with which the strings are touched. Slow melodies, diatonic and chromatic progressions, chords, broken or otherwise and many ornaments other than shakes are playable. To sustain a tone is only possible by an extremely rapid repetition of the note.

The following shows the proper use of the mandoline.

19. Mozart, 'Don Juan', No. 17, Canzonetta.

Allegretto.

Violino I & II. *pizz.*

Viola. *pizz.*

Mandoline. *pizz.*

Don Juan.

Violoncello & Contrabasso. *pizz.*

Horch auf den Klang der

Zi - ther! und öff - ne mir das Git - ter, o lind' - re mei - ne Pein und lass mich glücklich sein!

In the following compositions the mandoline is effectively used:

Grétry, Serenade in 'L'amant jalouse'.

Handel in Alexander's Feast.

Paisiello in 'The Barber of Seville' (Serenade).

The Zither.

Of this instrument there are various kinds, differing in shape and sound: the discant, concert, elegy or bass zither. Here we will speak only of the first, an instrument with 38—42 strings, with a compass from *g*, *a* to *d*. The strings, with the exception of the three on the finger-board, are tuned chromatically, and diatonic and chromatic scales are playable on the 3 strings mentioned by gripping with the left fingers, and plucking the strings with a small piece of metal. Music for zither is written in both violin and bass clefs on two lines. Its effect depends more or less on the taste of those who are interested in the instrument. It is usually played by amateurs, and is rarely found in an orchestra.

The following extract shows its use.

20. Lumbye, 'Traumbilder-Fantasie'.

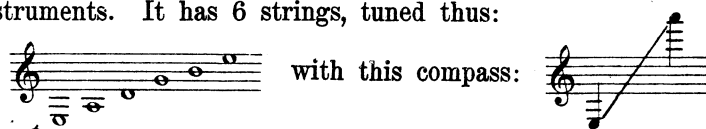
Moderato.

Zither. *p*

Violino I & II. *ppp*

Viola. *ppp*

the national instrument of Spain, has become acclimatised in several other countries, but in Germany has been superseded by other instruments. It has 6 strings, tuned thus:



Its music is on one line in the violin clef; it is held like the mandoline, and is used for accompaniments, and but rarely for solos. For further information the reader is referred to various Guitar Tutors, but it may be added that Rossini has used it in *The Barber*, and Weber in *Oberon* — (Act I).

The Pianoforte.

A lengthy dissertation on this instrument is not necessary here since every musician is familiar with it and its uses whether for solos or accompaniments.

A word may be said about its predecessor, the Cembalo, which formerly was frequently found in private houses and concert rooms, and was used by the older composers, as Bach and Handel. It was somewhat similar in shape to our present grand piano, but it varied more; it had steel and brass strings which were made to vibrate by depressing keys which acted on quills. It had a compass of some 5 octaves from *F* to *f*; and had 2 or even 3 key-boards, like an organ. Its strings were 2, 3 or 4 fold. The cembalo with two sets of strings was of 8 foot tone; with 3 it was generally tuned 8 foot twice and once 4 foot; with 4, twice 8 foot, once 4 foot and once 16 foot. The 3 and 4 could, by means of stops, be used alone or coupled together. The instrument was used orchestrally and in choral works to fill in the harmony and to accompany recitatives. Its music consisted generally of a figured bass, from which the cembalist extemporised an accompaniment. The cembalo was used till the end of the last (18th) and even into the present century, when it gave way before the 'Hammer-clavier' or pianoforte and the development of instrumental music. Nowadays the recitatives in *Don Giovanni* and in many old church works are accompanied on the modern pianoforte.

See Haydn's *Creation*, full score, Peters' Edition.

The Cimbalon

is a Hungarian instrument, and is largely used in Gipsy bands. It consists of a flat sounding body of various sizes (whereby the compass also varies), like the zither. The 2- or 3-fold metal strings are tuned chromatically from *e* to *e*³: the music is written in either the bass or violin clef as for piano. The strings are caused to vibrate by means of two small hammers, whose heads are covered with leather or felt. Chromatic or diatonic progressions can be played even in a tolerably rapid tempo. Chords of 3 or 4 notes can only be played in *arpeggio*, and such tones as are required to sound on are marked \sim over the notes, a sort of 'Prall trill' or short tremolo being executed. The tone of the instrument alone is generally sharp but rustling, and in combination with others it may be full of energy and 'go'. In nomadic bands the old form is usually met with, where the strings are tuned diatonically. The following may serve to show its use, derived from Schunde's tutor.

21.

Adagio.


Allegretto.

*) The instruments were made in various sizes, wherefore their compass also varied.

The Organ.

The organ, which nowadays is less frequently used in vocal and instrumental works than formerly, is still largely used in church compositions. Its chief component parts are the pipes, stops, keys and means of blowing or bellows.

The pipes are 1) flue; 2) reeds. Their number, which depends on the size of the organ, can exceed 100, and their tone be of every variety. The rows of keys are called manuals, of which there may be 1, 2, 3 or 4. The

compass of the manuals is usually from 4 to $4\frac{1}{2}$ octaves,  from C to g^3-a^3 . The manuals differ in 1) the number and size of the stops: 2) especial peculiarity of the tuning: 3) the difference in the tone character.

The stops of the 1st manual give a round, full tone; of the 2nd rather sharper and more penetrating; of the 3rd soft; and of the 4th tender and pleasant. This 4th manual is called the Echo organ, as it is used often to produce effects as if from a distance. In a 3 manual organ the Echo is played on the 3rd. Under the manuals are pedals, whose compass is from C to f .



The stops of an organ are arranged on either side of the player; by their means the connexion is set up with the interior mechanism, that is the wind is drawn into or shut out from various pipes; and on these stops, on which the name of each appears, lies the whole disposition of the organ. The number of pipes depends on the size of the organ, as does that of the stops.

The flue pipes are in the majority; they are open or closed, the former being clearer in tone than the latter. At the head of them stands the principal with its clear, powerful tone. The reeds have more brilliancy and strength and in combination with the flues give forth a very full mass of tone. The most powerful of them are the trumpet and trombone. Each of these two kinds of pipes has many stops, which differ materially in tone colour and in pitch.

Those tones which have already been mentioned are normally of 8 foot-tone; i. e. they sound as written. But the compass of manuals and pedals gives only a part of the compass of the organ. Since by means of draw-stops notes may be made to sound an octave or two higher or lower than written, it will be seen that the compass may be extended enormously, even to the very border-land where it is scarcely possible to differentiate between the notes. These tones which sound an octave higher than written, are called 4 foot: these 2 octaves higher are 2 foot, and 3 octaves, 1 foot. On the other hand these sounding an octave lower are 16 foot; 2 octaves lower 32 foot. An organ with all of these tones in the various octaves has a compass, therefore, of $9\frac{1}{2}$ octaves from double C to g^6 .

The lowest and highest notes are rarely used alone, but with others doubled; i. e., with the deepest tones the higher octave plays, whereby there is an increase of power and fullness; the highest notes are played in conjunction with their lower octave, whereby more brilliancy is attained.

To the flue pipes belong these which give not only the ground note but a higher 5th, 3rd or 7th; they can only be used when sufficiently veiled or with very full registration. Here also belong the mixed stops, which sound the octave, 5th and 3rd with the ground tone. To this class belong the mixtures, cornet etc. They lend brilliance and sharpness to the full organ.

In the works of Bach and Handel the organ is freely used 1) independently, 2) to accompany recitatives, 3) to complete the rather thin orchestration of the time, 4) to strengthen either chorus or orchestra. In modern compositions the organ is not so much used; and though it occurs as 1), it is much more used as 4) *ff*. For our purpose here we regard the organ not from the point of view of its size and power as a concert-instrument, but as part and parcel of choral and orchestral works. No hard and fast rule can be laid down as to the registration in sacred or secular works, since much depends 1) on the acoustic properties of the Church or Concert-room, 2) the specification of the organ, 3) the size of the choir, 4) the strength of the orchestra and the instrumentation. It is sufficient for an experienced organist to give him the grades of colour and of power required, and to leave the rest to him.

The following examples show the effective use of the organ alone and in combination with other instruments. Reference may also be made to Mendelssohn's *St. Paul*, Gounod's *Faust*, Brahms's *A German Requiem*, Wagner's *Lohengrin* and *Meistersinger*, Beethoven's Mass in *D*, and Rheinberger's Concerto for organ, 3 horns and strings.

Examples in score^b.

22. S. Bach, 'St. Matthew-Passion', No. 29, Aria. (Gerne will ich mich bequemen.)

Old Notation.

Violino I & II.

Basso Solo.

Organo e
Contiuno.

Ger-ne

23. Mendelssohn. Oratorio 'Elijah', No. 16, Recitativ and Chor. (Close.)

Flauti.

Oboi.

Clarinetti
in C.

Fagotti.

Corno III & IV
in E.

Trombi
in E.

Trombone Alto
&
Trombone Tenore.

Trombone Basso.

Timpani in
B and E.

Violino I & II.

Viola.

Soprano e Alto.

CORO.
Der Herr ist Gott, der Herr ist Gott, der Herr

Tenore e Basso.

Organo.

Violoncello
&
Contrabasso.

The horns and trumpets used here are without ventsils.

24. Mendelssohn, 'Hymn of Praise'.

Allegro di molto.

Corno in B \flat basso. *mf*

Violino I. *mf*

Violino II. *mf*

Viola. *mf*

Alto. (Coro) *mf* Und al - les Fleisch lo - be sei - nen hei - li - gen Na - - men

Organo. *mf*

Violoncello & Contrabasso. *mf*

25. Mendelssohn, '98th Psalm'.

Allegro.

Flauti. *f*

Oboi. *f*

Clarineti in C. *f*

Fagotti. *f*

Corni in D. *f*

Trombi in D. *f*

Tromboni. *f*

Timpani.

Violino I & II. *f*

Viola. *f*

Soprano e Alto. *f* Und die Völ-ker mit Recht, und die Völ-ker mit Recht, und die Völ-ker, die Völ-ker mit Recht

CORO.

Tenore e Basso. *f*

Organo. *f*

Violoncello & Contrabasso. *f*

Andante mistico.

Oboi.
Clarineti.

4 Corni
in F.

Fagotti.

Violino I & II.
sotto voce
p

Viola.
p

Tenore I & II.
CORO.
Basso I & II.

Organo
ossia
Harmonium.
pp
Pedal

Violoncello.
sotto voce
p

Contrabasso.
p

Al - les Ver - gäng - li - che ist mir ein Gleichniss, das Un - zu -

Detailed description: This system of the musical score includes staves for Oboes and Clarinets, 4 Horns in F, Bassoons, Violins I & II, Viola, Tenors I & II (Chorus), Basses I & II, Organ/Harmonium with a Pedal part, Violoncello, and Contrabasso. The tempo is 'Andante mistico'. The vocal parts (Tenors and Basses) sing the lyrics 'Al - les Ver - gäng - li - che ist mir ein Gleichniss, das Un - zu -'. The organ part is marked 'pp' and includes a 'Pedal' section. The string parts are marked 'p' and 'sotto voce'.

Clar.
Ob.
Clar.
a 2.

läng - li - che hier wird's Er - eig - niss, das Un - be - schreib - li - che, hier wird es ge - than

Detailed description: This system continues the musical score with staves for Clarinet, Oboe, and Clarinet (second part). The vocal parts continue with the lyrics 'läng - li - che hier wird's Er - eig - niss, das Un - be - schreib - li - che, hier wird es ge - than'. The organ part continues with sustained chords. The string parts continue with their accompaniment.

27. Meyerbeer, 'Robert the Devil', (Act V). (By permission of Schlesinger, Berlin.)

Recitativ.

Organo. Flute stops. Ped.

Bertram. Robert. Bertram. Robert.

Was ist? bist wankend du schon worden? Hörst du nicht den Gesang? Was kümmert der uns wohl So auch hört' ich ihn

28. Fr. Liszt, 'Faust-Symphony'. (Close.)

ein-stens in mei-ner Kindheit Ta - gen, als

Al-les Ver - gäng - liche

Organo

Wood. Tromp. Cor.

Violino I & II.

Viola.

Violoncello.

Contrabasso.

29. Ch. Gounod, 'Faust'. Church-Scene.

Organo Solo. *p legato*

30. Meyerbeer, 'Le Prophete', (Act IV).

Recitativ. *a tempo moderato*

Fiedes. dass Gott schütze den Herrn den Propheten! flehensie! Grosser Gott! er - höre mein Ge - bet,

Organo. Ped. senza Ped.

dass er irrend, e-lend und verbannt auf Er - den Stra - fe fin - de und dass im Himmel

Ped.

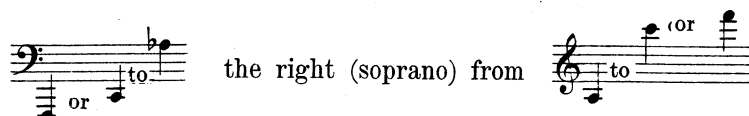
D. & F. 7

The Harmonium.

The harmonium, which is developed from the Physharmonika, and nowadays often plays an important part in churches, schools, and the house, is also found as a substitute for the organ in both concert-room and theatre.

Harmoniums differ widely from each other in shape, construction, compass and tone. There are small instruments with one manual, without stops (except the *f* stop), others with 4, 8 or more stops and a knee-swell for *cresc.* and *dim.* effects. On large harmoniums there are 2 manuals, a large number of stops, pedals like those of the organ, and bellows, blown by a 2nd person. The stops are always above the key-board. The tone of a harmonium may be described generally as soft; although by means of the stops all sorts of tone colours can be produced, yet its normal colour is nearly always the same. The various makes also differ. The tone of the American organ is soft and mild, and of the German and French harmoniums resembles that of the organ. The French differ from the German in their sharper tone-colour.

The manual compass comprises (according to its size) 4—5 octaves, the larger instruments from *F* to *f*³; the normal pitch is 8 foot tone, i. e., the notes sound as written. The natural compass of the manuals can be extended by means of stops, those on the left-hand side being 16 foot (sounding an octave deeper), those on the right hand, being one 4 foot (an octave higher) and one 2 foot (2 octaves higher). This last is only found on very large harmoniums. The manual is divided into two halves by means of the registers, the bass half extending from



On a harmonium there are speaking and dumb stops, the former having an individual tone and the latter merely changing the tone-colour, when they are drawn together.

In order to impress upon the student's mind the stops of the harmonium, a few arrangements of stops on various instruments are appended.

On German and French harmoniums the various stops are generally denoted by figures on the knobs, so that each figure appears on the right hand as well as the left of the player. Thus:

Deep stops.

- ① Cor anglais 8 foot
- ② Bourdon...16 "
- ③ Clairon.....4 "
- ④ Basson.....8 "

High stops.

- ① Flûte.....8 foot
- ② Clarinette 16 "
- ③ Fife.....4 "
- ④ Hautbois....8 "

The stops are also found in this arrangement:

American Organ.

Diapason. Viola. Dulcet. Sub.-Bass. Flügel-Horn. Octave. Coupler. Voix humana. Forte. Piccolo. Cremona. Cello. Aeoline. Flute.
Voix celeste. Principal. Melodia. Gr. Organ. Gr. Swel.
Dumb Registers.

French Harmonium.

Violoncell. Sourdine. Basson. Clarion. Bourdon. Cor anglaise. Percussion. Forte. Expression. Forte. Percussion. Flute. Clarin.
Fire Hautbois. Tremolo. Musette. Voix celeste. Dumb Registers.

Tone of the various stops.

Cor anglais (1) and *Flute* (1) are 8 foot and are of a soft tone.

Bourdon (2) and *Clarinet* (2) are 16 foot and are sonorous, adding power and fullness to the 8 foot.

Clairon (3) and *Flageolet ou Fijre* (3) are 4 foot and are sharp, adding brilliance to the 8 foot.

Bassoon (4) and *Hautbois* (4) are 8 foot and are sharper than (1) their tone is full.

Voix humana (VR) is generally 8 foot, *Voix celeste* (C) 16 foot, both being tender in tone.

Deuxième Bourdon (2B) and *Musette* (5) are 16 foot and powerful.

Prolongement (P) is an independent 8 foot stop, by whose means a note or chord may be made to sound on after the finger has left the key.

Forte (F) or (O) makes the sound louder.

Sourdine (S) weakens the *Cor anglais* and *Basson*.

Tremolo (T) causes the tone to 'tremble'.

Grand jeu (G) combines all stops except (VR) and (C)

Expression (E) is sympathetic and enables the player to play from *pp* to *ff*.

The composer can give the number of the letter of the stops required by him, thus:

31. Mozart, 'Ave verum corpus'.

Adagio.

Ueber allen Gipfeln ist Ruh'. Kuhlau.

Sostenuto.

Choral. „Nun danket alle Gott“

If a stop is no longer required its number is obliterated in the score thus: ~~(1)~~ ~~(S)~~

The tone colour of the harmonium is by no means so solemn and impressive as that of the organ, though it has something of the solemn in it. Its gentle tone enables it to combine well with the strings, harp or piano, or these mixed; but it goes less well with the wood or brass, although it may be used advantageously enough even here. It is rarely found in the orchestra, though often used where there is no organ.

Of the use of dissonant Passing and Changing notes,

whose effect is not disconcerting. (Cf. Part I, strings, p. 37—39.)

Examples in score^c.

32. Beethoven, Concerto for violin. (Mov. I.)
Allegro ma non troppo.

Oboi.
Corni in D.
Violino Solo.
Violino I & II.
Viola.
Violoncello & Contrabbasso.

cresc.
cresc.
cresc.
sfz.
cresc.
sfz.
cresc.

33. Brahms, Concerto for Violin, Op. 77. (Mov. I.)
Allegro non troppo.

Flauti.
Clarinetti in A.
Corni in E.
Violino Solo.

34. Mendelssohn, Op. 22, Capriccio for Piano and Orchestra.
Allegro.

Oboe I.
Fagotto I.
Clavier.

*) Oboe and bassoon are predominant here, so that the 3 consecutive 2nds are not noticeable.
D. & F. 7

35. Spohr, 'Jessonda', No. 1. Peters' score Edition p. 27.

Allegro vivace.

Clarineti in B \flat .
Fagotti.
Violino I.
Viola.
Violoncello & Contrabasso.

36. Weber, Concerto for Clarinet. F mi. (Mov. III).

Allegretto.

Clarineti in B \flat .
strings

See also Pt. V, p. 19, last bar: clarinet 1 and oboe, and Pt. IV, p. 41, No. 24.

37. Brahms, Symphony D. (Mov. I.) (By permission of N. Simrock, Berlin.)

Allegro non troppo.

Corni in D.
Viol. I.
Viol. II.
Viola.
Violone & Contrab.

See Pt. V, p. 25, No. 42: violin-solo and violin 1; and No. 58 oboes and violins 1 and II.

38. J. Haydn, Symphony D. (Mov. I.)

Flauto.
Oboi.
Corni.
Fagotti.
Violino I & II.
Viola.
Violoncello & Contrabasso.

39. Mozart, Symphony E \flat . (Mov. I.)

Adagio.

Flauto.
Clarineti.
Fagotti.
Trombi.
Corni.
Violino I & II.
Viola.
Timpani.
Violoncello & Contrabasso.

See Pt. VI, p. 27, No. 23.

D. & F. 7

40. Mozart, Symphony C. (Mov. II.)
Andante cantabile.

Violino I.
Violino II.
Viola.
Violoncello & Contrabasso.

Fagotti.
Corni.

1 Fl.
2 Ob.
Cor.
Fag. a 2.

41. Beethoven, Overture 'Leonore', No. 2.

Flauti.
Oboi.
Clarinetti.
Trombi.

Fagotti.
4 Corni.
3 Tromboni.

Violino I.

Violino II.

Viola.

Violoncello
&
Contrabasso.

42. Beethoven, Overture 'Die Geschöpfe des Prometheus'.

Allegro molto con brio.

Flauti.
Oboi.
Clarinetti.
Trombi.

Fagotti.
Corni.
Timpani.

Violino I.

Violino II.

Viola.

Violoncello
&
Contrabasso.

43. Mendelssohn, Oratorio 'St. Paul', No. 33. (Chor of Heathens.)

Presto.

Flauti.
Oboi.
Clarinetti.
Trombi.
Corni.

Fagotti.
Timpani.

Violino I & II.

Viola.

Soprano e Alto.
CORO.

Tenore e Basso.

Violoncello & Contrabasso.

Die Göt-ter sind den

44. Meyerbeer, 'Les Huguenots'. (Act I.)

Violino I & II.
Flauto picc.
Flauti.
Oboi.

Viola, Violoncello.
C. Basso, Fagotti.

Trombi.
Corni.

3 Tromboni.
Oficleida.

Timpani in E.
Gran Cassa.

45. Wagner, 'Lohengrin'. (Orig. full score p. 186.)

Oboi.
Clarinetti.

Violino I & II.
Viola.

Männerchor.

Violoncello & Contrabasso.

46. Brahms, Symphony Cmi. (Mov. IV.)
Allegro non troppo.

Flauti.
Oboi.
Clarinetti.

Fagotti & Contrafagotto.

4 Corni.

Trombi.

Violino I & II.

Viola.

Violoncello & Contrabasso.

47. Wagner, Overture 'Tannhäuser'. (F. score p. 20.)

Clarinetti.
Corni.

Cor. I. II.
Cor. III. IV.

Fagotti.

Violino I & II.
Viola.

Violoncello.

Tuba basso.
Contrabasso.

cresc.

cresc.

cresc.

cresc.

cresc.

Timp.

48. Wagner, Overture 'Tannhäuser'. (F. score p. 34.)

Assai stretto.

Flauti.
Oboi.
Clarinetti.

Fagotti.
4 Corni.

3 Trombi &
3 Tromboni.
(unisono)

Tuba basso.

Violino I & II.

Viola.
Violoncello
&
Contrabasso.

f

ff

f

ff

f

ff

f

ff

f

ff

Timp.

49. Wagner, 'Die Meistersinger', Prelude.
(F. score 25, bars 3 and 4.)

Fl. III.

Fl. I.

Fl. II.

Ob. I.

Ob. I and Cl. II.

Ob. II.

Ob. II and Cl. I.

Tr. I.

Tr. I.

Cor. I and III.

Cor. II and IV.

Cor. I.

Cor. II.

Cor. III and IV.

Fg. I.

Fg. II.

Tromb. III.

Tromb. I a. II.

Viola = Violonc.

Timp.

Picc.

50. Wagner, 'Die Meistersinger', Prel. (F. score 32, bars 2 and 3.)

Trombi.

Tromb. I.

Viol. I.

Viol. II. Viola.

Vel.

C. B.

Timp. *f*

Timp.

51. Wagner, 'Die Meistersinger', 2nd Act. (F. score 172, bars 1—3.)
Lebhaft, doch nicht zu schnell.

Fl. u. Clar. I. II. u. Fag. I. II.
Corni
ff

Violino I.
f
pizz. arco
p
6

Violino II.
f
pizz. arco
p
div. 3 6

Viola.
f
pizz. arco
p
6 6

Violoncello & Contrabasso.
ff
p

52. Wagner, 'Lohengrin'. (Orig. F. score p. 89.)
Schnell.

3 Fl. 3 Cl.
ff 3 ob.
Corni
ff 3 Tromb. a 2.

Violino I & II.
ff

Viola.
ff

Violoncello & Contrabasso.
ff

53. Nicodé, Symphonic-Ode 'Das Meer'.
(F. score 36.)

Fl.
ob.
Cor.
3 Tuba.
C. B. Tuba.
VI. I. a. II.
Via. a. Vcl.
Contrabasso.

54. Nicodé, Symphonic-Ode 'Das Meer'. (F. score 39.)

Fl.
ob.
Cl.
4 Cor.
Tr. I.
Tromb.
Fag. Tuba.
Viol. I, II u. Vla.
Violoncello con Viol. I 6^{va} basso.
Vla.
Contrabasso.

Cf. R. Wagner, 'Rienzi' overture.
Schumann, C-major symphony, 2nd movement. Scherzo, etc.

The orchestra in its various forms.

The orchestra is called small or full according to the instruments included in it. In the former the arrangements can be varied greatly, while the latter includes all the instruments in general use at present.

We divide the kinds into 3: small, medium and full: the following may be taken to represent the instruments in these.

Small.	Medium.	Full.
1 flute.	1—2 flutes.	3 flutes.
1 oboe. (?)	1—2 oboes.	2 oboes.
2 clarinets.	2 clarinets.	1 English-horn or alto-oboe.
1 bassoon. (?)	1—2 bassoons.	2, also 3 clarinets.
2 horns. (?)	2—4 horns.	1 bass-clarinet.
2 trumpets.	2—3 trumpets.	2, also 3 bassoons.
1 trombone.	1—2, also 3 trombones.	1 double-bassoon.
drums and cymbals and kettle-	drums and cymbals and kettle-	4 and more horns.
drums.	drums.	2 cornet à pistons.
1. violin 1—4.	1. violin 4—8.	3—4 trumpets.
2. violin 1—3.	2. violin 4—6.	3—4 trombones.
viola 1—2.	viola 3—5.	1 double-bass-tuba.
violoncello 1. (?)	violoncello 2—3.	drums and cymbals and kettle-
double-bass 1.	double-bass 2.	drums.
		1—2 harps.
		1. violin 10—20
		2. violin 8—18
		viola 7—16
		violoncello 6—12
		double-bass 6—9

In small dance orchestras or the like, many of the instruments marked (?) are not found. In the medium bands is usually a harp. In a score the instruments are arranged as the above.

A solo part (viol. piano etc.) is usually written between the kettle-drums and 1st violins. Often, as has been seen, a score is reduced in size by omitting these instruments which have a prolonged rest. In choral and orchestral works the solo and chorus parts are written between viola and violoncello.

Dynamic Nuances.

To obtain a *p* or *pp* does not necessarily imply a reduction in the number of instruments employed, for any tone can be played from *pp* to *ff* by one or many instruments or groups, and even by a full orchestra.

A *cresc.*, which often occurs from *pp* to *ff* can be either long or short. It can be played in unison or sustained tones or in passages, in slow or rapid changes of harmony, and by adding new instruments or increasing the tone of those already playing.

Three different kinds are described here:

1) The *Crescendo* which begins with a few instruments and is increased by the gradual addition of more in the same grade of tone; whereby the mass of tone is added to. Its effect is not so much exciting as numbing.

2) The same, but each instrument of itself making a *crescendo* as it enters, whose effect is intensely exciting.

3) The fullest *Crescendo* performed simultaneously by the full band growing from *pp* to *ff*.

Diminuendo or *decrecendo*, which may be from *ff* to *pp* is the exact reverse of the above.

Often a *Crescendo* does not rise to its fullest heights, so also it may be with *diminuendo*.

See **Beethoven's** symphonies, end of 'Egmont' overture;

'Fidelio' overture, adagio, tempo 3:

R. Schumann end of 'Genoveva' overture.

Cherubini, overture to 'Anacreon'.

*) Violoncello and Bass are on one line.

Contrasts.

Contrast, which in instrumental music gives light and shade, is so enormous a subject and of such importance that a few hints may advantageously be given here. The methods of obtaining a contrast are so very numerous, almost boundless, that an entire treatise would be necessary to enumerate them; yet we may give a few of the principal here.

- 1) Contrast by the entrance of instruments.
- 2) Alternation of single or mixed groups.
- 3) Alternation of groups and full band.
- 4) from *ff* or *f* to *pp* or *p* suddenly on groups or full orchestra.
- 5) By rapid change from high to low register and vice versa.
- 6) By sudden change from full to thin harmony or the reverse.
- 7) The use of different kinds of instruments in succession.
- 8) Change of rhythm and form of accompaniment.
- 9) The transference of the melody to instruments of varied tone colour.
- 10) The contrast of instruments themselves of one or other group.
- 11) Strengthening the melody in unison or the octave by strings, wood or brass or a combination.
- 12) By sustained harmony of strings, wood or brass, while others accompany the melody in a different form.

The student should again read about the contrasts under 'Strings', pt. 1; wood, pt. II: and so on through the various groups in pts. IV, V, VI and VII. By using instruments of percussion many new fields of contrast are opened.

Every period should contrast with its predecessor in tone-colour, which, indeed, can occur in one single bar. If one particular passage in the middle of a period or part enters very effectively, note should be taken of it to use it when a passage occurs that is neither brilliantly nor effectively scored. The difficulties of creating effects vanish as soon as several instruments enter together.

Of the use of instruments in vocal solos and choruses.

The wood-wind bears unquestionably a stronger likeness in tone-colour to the human-voice than either strings or brass. And since the strings are among themselves the most level-toned and distinct in colour from the voice, they are the best suited for this reason and their own possibilities to take part in and aid vocal pieces. For this reason, again, they are usually chosen. But it should be noted here that the brass by no means always occupies a subordinate position in vocal music. In musical literature are many works wherein wood and brass, alone or combined, are used with splendid effect in conjunction with the voice or a chorus.

Care in using these must be taken that these instruments contrast well with the voices, and that their mass of tone does not drown the voice part. This latter must always be prominent so that it lose nothing of distinctness and expressiveness. Nor must it be forgotten with what instruments certain masses of tone can be obtained, and note must be taken that the human voice cannot be increased in power by means of instruments. As soon as the voice ceases the orchestra is free. It is not always good to accompany the voice part with one or more instruments, because under certain circumstances the effect of the part is thus spoiled; but in some cases, in couplets for instance, it is often good. Moreover the use of instruments, and their combination depends entirely on the meaning of the text and on the composer's impressions.

If in an aria or song an obligato string or wind instrument enter, it will always afford a contrast. In choosing such an instrument the greatest care should be taken with the voice part; and therefore as a general rule soft sounding instruments only should be used as the flute, oboe, clarinet, bassoon, horn or strings.

Of tone painting.

Just as the painter lends his pictures life and expression by means of his colours and their combination, so does the composer use his instruments to obtain an effective tone-colour. It is extremely difficult to give the student any idea of such natural or characteristic painting. The chief point is a thorough knowledge of the tone-colour and expressiveness of each instrument in all its registers, as well as the use and combination of a number of instruments so as to obtain full advantage of their individual peculiarities. If we examine the differences of style of the instrumentation of Mozart, Beethoven, Weber, Mendelssohn and Wagner, it will be seen at once how impossible is a complete explanation of what leads to each individual method. Not only genius for a sense of sound, but also for melodic and harmonic invention and expression, are the chief requirements for creative musical painting. By great diligence one may learn much; but only those will attain to any greatness who have these artistic peculiarities born in them. We have already shown fully in the examples given on previous pages the most varied characteristics of each single instrument and of combinations of several instruments, which must suffice. But a glance may be taken at a few 'paintings' which occur in the works of our old and modern masters.

Handel in his *Hercules* uses unalloyed natural music, the Italian bag-pipes; in the *Messiah*, the Pifferai or flageolet; in *Saul*, the Carillons (Glockenspiel); in *L'Allegro* an instrument to imitate the chirping of birds, the tambourine, the night-watch's horn, a large bell etc.

J. S. Bach, in a Church Cantata, uses two bells which he calls *Campanella* in the accompaniment to an alto solo.

Musical reproductions of Nature and Landscape are found in Handel's *Israel*, Haydn's *Creation* and *Seasons*, Beethoven's *Pastoral* symphony, Spohr's symphony *Die Weihe der Töne* (Consecration of Sound), Mendelssohn's overtures to *A Midsummer Night's Dream*, *A Calm Sea*, *Hebrides*, *Fingal's Cave*, Bruch's *Odyssey* (Storm at Sea), Rubinstein's *Tower of Babel*, Nicodé's symphonic ode *Das Meer* etc.; and in many operas.

For characteristic musical painting reference may be made to Liszt's symphonic poems, Berlioz's symphonies, (*Harald*, and the symphonie fantastique), Wagner's works.

The comic element occurs in old and new works, as in Mozart's *Il Seraglio*, *Così fan tutte*, Rossini's *Barber*, Lortzings's *Czar and Carpenter*, *The Poacher*, *Die beiden Schützen*; Nicolai *The Merry Wives of Windsor*, Flotow *Martha*, Goetz *The Taming of the Shrew*, Wagner *Die Meistersinger*, Berlioz *Benvenuto Cellini* (Carneval), Cornelius *Barber of Bagdad*.

Further, the pupil may be referred to Kretschmar's *Führer durch den Concertsaal*, p. I and II and Ambros *Die Grenzen der Musik und Poesie*.

Of Arrangements.

In the preface we have already stated our opinion of transcriptions or arrangements of music; nevertheless they are useful for study. As a matter of fact many instrumental arrangements of pianoforte compositions sound better and more effective than in their original form. In many phases of life such good arrangements are practically a necessity, for if they are entirely barred, the repertoire of many a small orchestra would be reduced to infinitesimal dimensions, while works written for a large orchestra would never reach the hearts of the people at all.

Such arrangements may be divided into 4 classes.

- 1) Works for large orchestra arranged for a smaller.
- 2) The opposite of this, as a pianoforte piece arranged for trio, 4^{tet}, 5^{tet} or band.
- 3) The arrangement of a piece written for concert-orchestra for a military band, or for orchestra arranged for pianoforte.
- 4) The composing of arrangements as transcriptions, fantasias etc.

In 1) some instruments would have to be withdrawn, but in 4) still more, where voice parts are arranged for instruments. Of such arrangements as a rule no printed scores exist, but only a conductor's part, which serves as a 1st violin part as well, in which the directions are written. If a vocal number is arranged for a wind instrument it is good to add the text under the solo part to inform the player of the meaning of the music. From the artistic standpoint this last kind of arrangement is sheer nonsense, and composers have often fought in vain against it for reasons already specified. When several arrangements of the same piece exist, this is the best sign that the work is receiving attention and that such an arrangement is required.

Of the omission or replacing of various instruments.

In the matter of the omission or replacing of missing instruments where large works are to be played by small bands, the following notes may be of use. It is not every conductor who has at command a sufficient orchestra to play many great works; he is therefore compelled to supply some similar instrument under his hand for that which he has not. If he has a flute but no 2nd flute, for which there is a part, he may use the oboe if the part is in the higher register, or the clarinet; the latter being preferable in the deeper register. But if in such a case both oboe and clarinet are already occupied, the 1st violin must take the flute part.

The need of a 2nd oboe is not so noticeable, yet when one happens to be required it may be supplanted by flute or clarinet: in exceptional cases (sustained tones in the deeper oboe register) the trumpet (*pp*). If these are occupied, then again the 1st violin must step in.

If bassoon 2 is missing, a horn may take the lower notes if there is no passage work or ornamental figures; or even the violoncello.

When horns 3 and 4 are wanting, 2 bassoons can be used, or 1 bassoon and 1 tenor-trombone, also 2 trombones; viola and violoncello are less satisfactory (and only usable *p* or *pp*); and still less the trumpets.

The alto or tenor-trombones can be replaced by a trumpet and horn, and 2 tenor-trombones may sometimes be replaced by horns.

Trumpets 3 and 4 can be taken by trombones, rarely by horns, since their tone is milder *f* or *ff*.

The English-horn may be replaced by the oboe if the compass suits (cf. Rossini, *Tell* overt.), otherwise by viola or clarinet in *A* or *B*♭.

The bass-clarinets may in certain circumstances be replaced by the clarinets in *A* or *B*♭, but if the compass is unsuitable, by bassoon and violoncello, or the latter alone.

Basset-horns are now rarely met with, and are usually replaced, in works for which a part exists, by clarinets.

The double-bassoon must be replaced by double-bass or double-bass-tuba, the latter also taking the parts written for serpent and ophicleide.

Of course other remedies may be applied as occasion requires.

Exercise I.

Arrange dances (pianoforte) for small, medium and large orchestras.

See pt. I. Strings (dances): the following notes, the examples in score, and what has already been said, will suffice for the wind.

In dance music the flutes, large and small, are almost invariably used to play the melody, either in unison with violin 1 (if in the higher octaves) or flute in higher octave when violin is in the lower or middle. They are used for ornaments when the melody is on a lower instrument.

If two flutes are used they can be written for thus: 1) 2 flutes; 2) 1 flute and 1 piccolo played by the 2nd player; 3) 2 piccolos, which is rare. As already mentioned the player can pass from flute to piccolo or vice versa very rapidly, so that in the course of a piece both instruments may be played by one player provided they have not of course to play simultaneously.

If in the violin melody double stopping occurs, the flute playing the actual melody with the violin, the 2nd flute then takes the lower violin part, or if a piccolo be playing with a flute, the former takes the melody, the latter the lower part. Very rarely is this reversed.

Clarinet 1 also is seldom used for any purpose than to play the melody, by supporting violin 1 in unison in all 3 registers; but in the highest the clarinet plays an octave lower. It is used also for ornaments, not often to accompany or fill in the harmony. Clarinet II takes a subordinate part: it supports the melody in unison or the lower octave, and for ornaments, accompaniments, or to fill in the harmony. If the 1st violins are divided clarinet I plays the upper, clarinet II the lower, part. Clarinets are often found in 2 keys in dance music; thus in sharp keys, 1st clarinet in *D*, 2nd clarinet in *A*, or both in *C*; in flat keys 1st—2nd, 1st clarinet in *C* or *E*♭, 2nd clarinet in *B*♭ or both in *B*♭. The high *D*-clarinet is of clearer and sharper tone than that in *C* as a melody-instrument in the middle and high register, and moreover it is easier for the player in sharp keys and the higher register than the *A* and *B*♭-clarinets. The *E*♭-clarinet would hardly be found in such an orchestra.

The oboe, of which there would be either one or two, plays no very necessary rôle in dance music. The 1st oboe is often used to support the melody, but generally for decorative purposes or to fill in the harmony; the 2nd oboe also appearing in this last capacity as a rule, but in such a manner that it may be omitted.

The bassoon, when one or two are found, is used in the same manner as the oboes, but it is of more use because of its superior compass and technical capacity. The 1st bassoon can be used to support the melody in the lower octave, for ornaments, filling in the harmony or strengthening the bass: the 2nd bassoon is nearly always used in the two latter capacities.

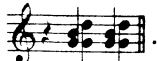
The horns are divided into one or two pairs and in dance music are generally used to mark the rhythm of the 2 violins and viola parts, or to sustain harmony in the middle parts. In whichever of these two ways they are used the fullest sounding chords for 2 horns are written: 3^{rds}, 6^{ths} and 5^{ths} within the compass

Horn in F or E.



If 4 horns are used the 2nd pair is so disposed that the two pairs make complete harmony, thus:



In triads two horns can play in unison thus: 

In its best register the 1st horn can also take the melody alone or support it. In light music horns in *F*, *E*, *E^b* or *D* are usually found.

2 or 3 trumpets are used to strengthen the rhythm, for ornaments, accompaniments or the harmony in such chords as shown above. 1 trumpet is used often to play the melody but it should be so used sparingly, otherwise it becomes obtrusive and objectionable. If the melody is played in 3^{rds} and 6^{ths} trumpet I takes the upper, trumpet II the lower, part.

The trombones are used to strengthen the bass in unison or the octave, as well as the melody occasionally, and to aid the horns and trumpets in filling in the harmony. 3 tenor-trombones are used so that they may enter alone or as 2nd and 3rd respectively. (See the following examples in score).

Instruments of percussion in dance orchestras are taken by 2 players, the drummer taking also the small drum, triangle and Glockenspiel when time allows. The big-drum player takes the cymbals and triangle if necessary, also other similar instruments. (See following Exs. in score.)

Hereafter follow some examples of dances for small and full orchestra. I hold it to be necessary to give them for, unless I am in error, few printed full scores exist. Dances in ideal forms may be studied in Delibe's *Sylvia*; Rubinstein's *Feramors* ballet; Brahms's Hungarian Dances; Moszkowsky's Spanish Dances, and *Boabdil* ballet.

Examples in scored.

55. J. Lanner, Op. 93, Pester Walzer, No. 1.

Flauto I. *Piccolo.*
p

Flauto II.

Oboe.

Clarinetto I
in D.
p

Clarinetto II
in C.
p

Fagotto.

Corno I & II
in C.
pp
Nr. Trombi in C.
a 2

Tromba I & II
in D.
pp
a 2

Trombone.

Tambouro picc.
Tambouro grand.
& Piatti.

Violino I.
p

Violino II.
p

Viola.
p

Violoncello
&
Contrabasso.
p
a 2

NB. Formerly 4 trumpets were written in single numbers of a long valse. The hornists then took trumpets 3 and 4. Nowadays this could not be expected though it sometimes occurs.

This page of a musical score contains 14 staves. The first five staves are grouped by a brace on the left. The sixth staff is labeled 'Corni in C.' and includes a 'p' dynamic marking. The seventh staff has a 'p' dynamic marking. The eighth staff has a 'pizz.' (pizzicato) marking. The ninth and tenth staves are grouped by a brace on the left. The eleventh staff has a 'pizz.' marking. The twelfth and thirteenth staves are grouped by a brace on the left. The fourteenth staff has a 'p' dynamic marking. The score is divided into two measures by a double bar line. Dynamic markings 'f' (forte) and 'p' (piano) are used throughout. The key signature has one sharp (F#) and the time signature is 4/4.

56. J. Lanner, Pesther Walzes, No. 5.

The image displays a full orchestral score for the piece "56. J. Lanner, Pesther Walzes, No. 5". The score is arranged in two systems. The left system contains the first two endings of the piece, marked "1." and "2." at the top. The right system contains the main body of the score, starting with a *p* dynamic. The instruments listed on the right are: Flauto I., Flauto II., Oboe., Clarinetto I in D., Clarinetto II in C., Fagotto., Corno I & II in C., Tromba I & II in D., Trombone., Tambouro pic. & Piatti., Violino I. (marked *spiccato*), Violino II., Viola., and Violoncello & Contrabasso. (marked *a 2.*). The score includes various musical notations such as notes, rests, slurs, and dynamic markings.

This musical score page, numbered 40, contains a complex arrangement for piano and orchestra. It features 14 staves. The top two staves are for the piano, with the right hand in treble clef and the left hand in bass clef. The remaining 12 staves are for the orchestra, including woodwinds, strings, and percussion. The score is divided into two main sections by a double bar line. The first section includes first and second endings. Dynamics such as *ff* (fortissimo), *p* (piano), *f* (forte), and *mf* (mezzo-forte) are used throughout. The notation includes various rhythmic values, slurs, and articulation marks.

Musical score for piano and orchestra, page 41. The score consists of 14 staves. The top two staves are for the piano, and the remaining 12 staves are for the orchestra. The music is in 3/4 time and features complex rhythmic patterns and dynamics. The score is divided into two sections, 1. and 2., with repeat signs. Dynamics include *ff*, *p*, and *f*.

Exs. 57-63 are printed by arrangement with Cranz in Hamburg.

57. Joh. Strauss, Op. 328, 'Sängerlust-Polka'.

The musical score is arranged in 18 staves, each corresponding to a different instrument or section of the orchestra. The instruments listed on the left are: Flauto, Flauto picc., Oboi, Clarinetti in C, Fagotti, Corno I & II in F, Corno III & IV in F, Tromba I & II in F, Tromba III in F, Trombone I & II, Trombone III & Tuba, Timpani in C. G., Tambouro picc. & Piatti, Violino I, Violino II, Viola, Violoncello, and Contrabasso. The score includes various musical notations such as notes, rests, and dynamic markings (f, p, pp). The time signature is 2/4.

They can be played thus by small or medium orchestras. (See p. 33.)

This page of a musical score contains 18 staves of music. The notation includes various rhythmic values, accidentals, and dynamic markings. The score is organized into several systems, with some staves grouped by brackets. Key features include:

- Staff 1:** Melodic line with dynamic markings *f* and *f*.
- Staff 2:** Melodic line with dynamic markings *f* and *f*.
- Staff 3:** Melodic line with dynamic markings *f* and *f*.
- Staff 4:** Melodic line with dynamic markings *f* and *f*.
- Staff 5:** Bass line with dynamic markings *f* and *f*.
- Staff 6:** Bass line with dynamic markings *f* and *f*.
- Staff 7:** Bass line with dynamic markings *f* and *f*.
- Staff 8:** Bass line with dynamic markings *f* and *f*.
- Staff 9:** Bass line with dynamic markings *f* and *f*.
- Staff 10:** Bass line with dynamic markings *f* and *f*.
- Staff 11:** Bass line with dynamic markings *f* and *f*.
- Staff 12:** Bass line with dynamic markings *f* and *f*.
- Staff 13:** Bass line with dynamic markings *f* and *f*.
- Staff 14:** Bass line with dynamic markings *f* and *f*.
- Staff 15:** Bass line with dynamic markings *f* and *f*.
- Staff 16:** Bass line with dynamic markings *f* and *f*.
- Staff 17:** Bass line with dynamic markings *f* and *f*.
- Staff 18:** Bass line with dynamic markings *f* and *f*.

58. Ed. Strauss, Op. 120, 'Weybrecht-Payer-March'.

Flauto. *ff* *mf*

Flauto picc. *ff* *mf*

Oboi. *ff* *mf*

Clarinetto I in E \flat . *ff* *mf*

Clarinetto II in B \flat . *ff* *mf*

Fagotti. *ff* *mf*

Corno I & II in F. *ff* *mf*

Corno III & IV in F. *ff* *mf*

Tromba I & II in F. *ff* *mf*

Trombone I & II. *ff* *mf*

Trombone basso. *ff* *mf*

Tambouro picc. & grand. *ff* *mf*

Violino I. *ff* *mf*

Violino II. *ff* *mf*

Viola. *ff* *mf*

Violoncello. *ff* *mf*

Contrabasso. *ff* *mf*

This page contains a complex musical score with 16 staves. The notation includes various rhythmic patterns, rests, and dynamic markings. The score is organized into two systems of eight staves each. The first system (staves 1-8) features a variety of melodic and harmonic lines. The second system (staves 9-16) continues the composition with similar textures. Dynamic markings such as *ff* (fortissimo) and *mf* (mezzo-forte) are placed throughout the score to indicate volume changes. A first ending bracket labeled 'a 2.' is present on the third staff of the first system. The key signature is one flat (B-flat), and the time signature is 4/4.

59. Joh. Strauss, 'Cagliostro-Quadrilles', No. 4.

Flauto. *f* *p*

Flauto picc.

Oboi.

Clarinetto I in E \flat . *f* *p*

Clarinetto II in B \flat . *p*

Fagotti.

Corno I & II in F. *sf*

Corno III & IV in F. *sf*

Tromba I & II in F. *p*

Trombone I & II. *f* *sf*

Trombone basso. *f* *sf*

Timpani in B \flat and F. *f* *sf*

Violino I. *f* *p* *sf*

Violino II. *f* *sf*

Viola. *f* *sf*

Violoncello. *f* *sf*

Contrabasso. *f* *sf*

This musical score page contains 16 systems of staves. The first system includes vocal lines (top two staves) and piano accompaniment (bottom four staves). The piano part features a complex texture with chords and arpeggios. The second system continues the vocal and piano parts. The third system shows the vocal lines and piano accompaniment. The fourth system includes a grand staff with two treble clefs and two bass clefs. The fifth system continues the grand staff. The sixth system shows the vocal lines and piano accompaniment. The seventh system continues the vocal and piano parts. The eighth system includes a grand staff with two treble clefs and two bass clefs. The ninth system continues the grand staff. The tenth system shows the vocal lines and piano accompaniment. The eleventh system continues the vocal and piano parts. The twelfth system includes a grand staff with two treble clefs and two bass clefs. The thirteenth system continues the grand staff. The fourteenth system shows the vocal lines and piano accompaniment. The fifteenth system continues the vocal and piano parts. The sixteenth system includes a grand staff with two treble clefs and two bass clefs.

60. Joh. Strauss, 'Roses from the south.' Walzes No. 1.

Flauto. *p*

Flauto picc. *p*

Oboe I & II. *p*

Clarinetto I in C. *p*

Clarinetto II in C. *p*

Fagotto I & II. *p*

Corno I & II in F. *p*

Corno III & IV in F. *p*

Tromba I & II in F. *p*

Trombone I & II. *pp*

Trombone III.

Timpani.

Tambouro picc. & Triangolo. Triang.

Tambouro grand & Piatti.

Violino I. *p*

Violino II. *p*

Viola. *p*

Violoncello. *p* *pizz.* *arco* *pizz.*

Contrabasso. *p*

61. Joh. Strauss, 'Roses from the south'. Walzes No. 2.

Flauto.

Flauto picc.

Oboi.

Clarinetto I
in C.

Clarinetto II
in C.

Fagotti.

Corno I & II
in F.

Corno III & IV
in F.

Tromba I & II
in F.

Trombone I & II.

Trombone III.

Timpani
in F. C.

Tambouro picc.

Tambouro grand
&
Piatti.

Arpa.

Violino I.

Violino II.

Viola.

Violoncello.

Contrabasso.

The musical score is arranged in 18 staves. The top two staves are vocal parts. The next four staves are a piano accompaniment. The bottom six staves are a grand piano accompaniment. The score includes various musical notations such as notes, rests, slurs, and dynamic markings like 'p' and 'f'. The key signature is one flat (B-flat), and the time signature is 4/4. The score is divided into measures by vertical bar lines. The grand piano part features a prominent bass line with a rhythmic pattern of eighth notes and sixteenth notes. The piano part has a melodic line with slurs and a bass line with chords. The vocal parts have a melodic line with slurs and a bass line with chords. The score is marked with 'p' (piano) and 'f' (forte) dynamics.

62. Joh. Strauss, 'Roses from the south'. Walzes No. 4.

Flauto. *mf*

Flauto picc. *mf*

Oboi.

Clarinetti in C.

Fagotti.

Corno I & II in F.

Corno III & IV in F.

Trombi I & II in F.

Trombone I & II.

Trombone III.

Timpani.

Tambouro picc. *p*

Tambouro grand & Piatti. *pp*

Violino I. *mf*

Violino II. *mf*

Viola. *mf*

Violoncello.

Contrabasso.

The musical score is arranged in two systems. The first system contains the piano part (left) and the orchestral part (right). The piano part consists of five staves, and the orchestral part consists of five staves. The second system contains the piano part (left) and the orchestral part (right). The piano part consists of five staves, and the orchestral part consists of five staves. The score is in B-flat major and 3/4 time. The piano part includes a section marked 'rit.' and 'a tempo'. The orchestral part includes a section marked 'f'. The score is written for piano and orchestra.

63. Joh. Strauss. Op. 279. „Morgenblätter-Walzer. N° 5.

Flauto. *f*

Flauto picc. *f*

Oboi. *f*

Clarinetti in C. *f*

Fagotti. *f*

Corno I & II in F. *f*

Corno III & IV in F. *f*

Trombi in F. *a 2.* *f*

Trombone & Tuba. *f*

Tambouro picc. *f*

Tambouro grand. *f*

Violino I. *f*

Violino II. *f*

Viola. *f*

Violoncello. *Solo* *f*

Contrabasso. *Solo* *f*

Examples in score^e.

The following are selected as showing generally the use of the whole orchestra (tutti).

64. Georges Bizet, 'Carmen', Act II, No. 14.

Allegro moderato.

The musical score is a page from a score for Georges Bizet's 'Carmen', Act II, No. 14. It is marked 'Allegro moderato'. The score is for a full orchestra, with parts for Flauti, Oboi, Clarinetti in A, Fagotti, Corno I & II in E, Cor. III. IV. in B basso, Cornetti in A, Trombone I & II, Trombone III, Timpani in B. E., Violino I, Violino II, Viola, Violoncello, and Contrabasso. The music is in 2/4 time, key of E major. The score shows a tutti arrangement with many instruments playing in unison or octaves. The first three measures are shown, with dynamics marked 'f' and 'a 2.'.

2 flutes, 2 oboes, 2 clarinets in unison and violin 1 and 2 in unison or octaves are found usually in French music. It is not invariably a good arrangement.

This page of a musical score contains 14 staves. The top four staves are for individual instruments, each starting with a treble clef and a key signature of three sharps (F#, C#, G#). The bottom ten staves are for a grand piano, with the right-hand part in treble clef and the left-hand part in bass clef, both in the same key signature. The score is divided into four measures. The first measure shows the initial melodic and harmonic material. The second measure begins with a dynamic marking of *p* (piano) and an articulation marking of *a2.* (accents) over a series of notes. The third and fourth measures continue the melodic and harmonic development. The piano part features a steady eighth-note accompaniment in the right hand and a more active bass line in the left hand. The overall texture is dense and rhythmic.

65. Fr. Liszt, 'Hungarian Rhapsody', No. 2.

Tempo giusto vivace marcato assai

Flauto
Flauto picc.
Oboi.
Clarinetti in B \flat .
Fagotti.
Corno I & II in F.
Corno III & IV in C.
Trombi in F.
Trombone I & II.
Trombone III.
Timpani in C. F.
Triangolo.
Tambouro picc.
Tambouro grand. & Piatti.
Violino I.
Violino II.
Viola.
Violoncello.
Contrabasso.

66. Ch. Gounod, 'Faust', Soldiers'-Chor, No. 22.

Tempo marziale.

Flauti.

Oboi.

Clarinetti in B \flat .

Fagotti.

Corni I. II. in E \flat .

Corno III & IV in B \flat basso.

Cornetti in B \flat .

3 Tromboni tenore.

Tambouro picc.
Tambouro grand & Piatti.

Corno Sax sopr. in E \flat . (Soprano-Saxhorn.)

Cornetti in B \flat .

Trombi in E \flat .

Tromboni alto in E \flat *)

Trombone tenore in C.

Corno Sax basso in B \flat . (Bass-Saxhorn.)

Corno Sax contrab. in B \flat . (Contrab.-Saxhorn.)

Violino I & II.

Viola.

Violoncello.

Contrabasso.

Fanfare Supplémentaire.

ff

a2.

Fanfare supplémentaire denotes music for brass on the stage. The saxhorns used here are shaped like a tuba and are in 7 keys and sizes; they are transposing instruments and used often in French and Belgian military bands. The soprano, alto and tenor saxhorns are written for in the violin clef. The soprano saxhorn in E \flat sounds a minor 3rd higher than its music is written. The bass and contrabass saxhorns use the bass clef, the former sounding a tone and the latter a 9th lower than written. These alto-trombones are transposing instruments. (See pt. VI) and sound a 6th below the written music.

67. Ch. Gounod, 'Faust', Soldiers'-Chor, No. 22.

Allegro di marziale.

Flauto. *p* *cresc.*

Flauto picc. *p* *cresc.*

Oboi. *p* *cresc.*

Clarinetti in B \flat . *p* *cresc.*

Fagotti. *p* *cresc.*

Corni I. II. in E \flat . *p* *cresc.*

Cor. III. IV. in B \flat basso. *p* *cresc.*

Cornetti in B \flat . *p* *cresc.*

3 Tromboni tenore. *p* *cresc.*

Tamburo grand & Piatti. *p*

Triangolo. *p*

Tamburo picc. *p*

Cornetti in B \flat . *p*

Trombi in E \flat . *p*

Tromboni alto in E \flat . *p*

Trombone in C. *p*

Corno Sax basso in B \flat . (Bass-Saxhorn.) *p*

Corno Sax contrab. in B \flat . (Contrab-Saxhorn.) *p*

Violino I. *p*

Violino II. *p*

Viola. *p*

Violoncello & Contrabasso. *p*

Fanfara Supplimentaire.

68. Ambroise Thomas, Overture to 'Mignon'.

Moderato. Tempo di Polacca.

Flauto. *cresc. ff*

Flauto picc. *cresc. ff*

Oboi. *cresc. ff* ^{a₂}

Clarinetti in A. *cresc. ff* ^{a₂}

Corno I & II in E. *cresc. ff*

Cornetti & Pistons in A. *cresc. ff*

Fagotti. *cresc. ff*

Trombone I & II. *ff*

Trombone III. *ff*

Triangolo. *ff* *tr*

Timpani in A. E. *ff*

Tambouro grand & Piatti. *ff*

Violino I. *cresc. ff*

Violino II. *cresc. ff*

Viola. *cresc. ff*

Violoncello. *cresc. ff*

Contrabasso. *cresc. ff*

69. Fr. Liszt, 'Hungarian Rhapsody', No. 2.

Tempo giusto vivace marcato assai.

Flauto.
Flauto picc.
Oboi.
Clarinetti in B \flat .
Fagotti.
Corno I & II in F.
Corno III & IV in C.
Tromba I & II in F.
3 Tromboni.
Timpani in C.
Triangolo.
Tambouro picc.
Tambouro grand & Piatti.
Arpa.
Violino I.
Violino II.
Viola.
Violoncello.
Contrabasso.

70. Ch. Gounod, 'Faust', Act II.

Allegretto.

Flauto. *ff*

Flauto picc. *ff*

Oboi. *ff* a²

Clarinetti in B \flat . *ff* a²

Fagotti. *ff*

Corno I & II in F. *ff* a²

Corno III & IV in C. *ff* a²

Cornetti in B \flat . *ff*

3 Trombone tenore: *ff*

Timpani in C. F. *ff*

Tambouro grand & Piatti. *ff*

Triangolo. *ff*

Violino I. *ff*

Violino II. *ff*

Viola. *ff*

Violoncello & Contrabasso. *ff* a²

Exercise II.

Arrange marches in concert form for medium and large orchestras.

In scoring such marches the following are recommended for study: Mendelssohn's Wedding march, War march from *Athalie*, Coronation march from *Le Prophète*; Kretschmer's march from *Die Folkunger*; Wagner, *Tannhäuser*: Entrance of the Guests, the Kaisermarsch and Huldigungsmarsch; Liszt, Crusader's march from *St. Elizabeth*: and Volkmann's op. 22, No. 1, 2, 3, Schubert's military marches may be arranged.

Exercise III.

Arrange some of the following for small and medium orchestras, and attempt as far as possible to imitate the style of Mozart and Beethoven. In order not to use the brass immoderately let the student only use the open or natural tones or the half-tones lying next to them.

Mozart.

- Sonata, G ($\frac{3}{4}$ time), Mov. I, Allegro.
- " F ($\frac{3}{4}$), Mov. I, Allegro; Mov. II ($\frac{2}{4}$) F, Allegretto.
- " C ($\frac{4}{4}$), Mov. II, Andante F.
- " F ($\frac{3}{4}$), Mov. I, Allegro assai; Mov. II, Adagio F-mi. ($\frac{6}{8}$); Mov. III, Presto ($\frac{3}{8}$).
- " F ($\frac{4}{4}$), Mov. I, Allegro.
- " A, Mov. II, Menuetto A; Movement. III, Alla Turca Ami.
- " C ($\frac{4}{4}$), Mov. I, Allegro con spirito; Mov. III, Rondo C ($\frac{3}{4}$).
- " B \flat , Mov. III, Menuetto B \flat .
- " D, Mov. I ($\frac{4}{4}$).
- " Ami, Mov. I ($\frac{4}{4}$).

Beethoven.

- Sonata, Op. 9, No. 2, Mov. II, Andante; Mov. III, Scherzo.
- " Op. 7, Mov. II, Largo.
- " Op. 10, No. 1, Mov. I, Allegro con brio; Mov. IV, Finale.
- " Op. 10, No. 2, Mov. II, Allegretto; Mov. III, Presto.
- " Op. 13, Mov. I, Grave Allegro; Mov. II, Adagio.
- " Op. 14, Mov. II, Andante Variations.
- " Op. 22, Mov. III, Menuetto.
- " Op. 26, Mov. II, Scherzo; Mov. III, Marcia funèbre.
- " Op. 27, Mov. II, Adagio.
- " Op. 28, Mov. II, Andante; Mov. III, Scherzo.
- " Op. 31, No. 1, Mov. I, Allegro vivace.
- " Op. 31, No. 3, Mov. I, Allegro; Mov. II, Menuetto.

Mozart, Fantasia e Sonata.

Schubert, Fantasie Op. 15 C.

- " Tempo I Allegro and Tempo III Presto.
- " Op. 94, No. 1, 2, 6.
- " Op. 143, No. 5, Sonata Ami.
- " Op. 90, No. 1, 3.

In arranging modern compositions for one or other of the three orchestras the ventral-brass will be used; the wood can be *a due* or *a tre*.

A study of the following arrangements is recommended.

Mozart, Turkish March from Sonata in A ($\frac{6}{8}$ time), Original 2 hands, for orchestra by Prosper Pascal.

Weber, Op. 12, Momento capriccioso, Original 2 hands, for orchestra by Schulz-Schwerin.

Weber, Invitation to the Dance, Original 2 hands, for orchestra by Hector Berlioz.

Schumann, Bilder aus Osten, duet for orchestra by Carl Reinecke.

- Schumann**, Gipsy-life for chorus and pianoforte, for chorus and orchestra by Grädener.
Volkman, Wanderskizzen Op 23, No. 4, 'In der Schenke', Original solo for orchestra by Schulz-Schwerin.
Liszt, Hungarian Rhapsody, Original solo for orchestra by the Composer and F. Doppler.
Brahms, Hungarian Dances No. 1, 3 and 10, Original duet for orchestra by the Composer.
Rubinstein, Bal costumé Op. 103, Original duet for orchestra by M. Erdmannsdörfer.
 „ Melody, Original solo for orchestra by Müller-Berghaus.
Reinecke, 'Tanz der Libellen und Käfer'. A Ballet, Original solo for orchestra by Müller-Berghaus.
 „ 'Von der Wiege bis zum Grabe', 16 Pieces, Original solo for orchestra by the Composer.
Dvorák, Legends, Op. 54, Original duet for orchestra by the Composer.
Rheinberger, 2 romantic songs for 4 voices and pianoforte Op. 106, No. 1, Harold, for chor. and orchestra by the Composer.
Moszkowsky, Spanish Dances Op. 12, Original duet for orchestra by Phil. Scharwenka.

Examples in score^f.

In the following are many passages in which the full orchestra is employed with the greatest effect.

71. Gounod, 'Faust', Introduction Act I.

Adagio molto.

Flauto. *p dolce espress.*

Oboi. *p dolce*

Clarineti in B \flat .

Fagotti. *pp*

Corno I & II in F. *pp*

Corno III & IV in C. *pp*

Tromba I & II in C. *pp*

Timpani in F. C. *pp*

Arpa.

Violino I. *p dolce*

Violino II. *pp*

Viola. *pp*

Violoncello & Contrabasso. *a2 pp*

72. Beethoven, Symphony in A, No. 7. (Mov. II.)
Allegretto.

Flauti. *ff* *a²*

Oboi. *ff*

Clarineti in A. *ff*

Fagotti. *ff*

Corni in E. *f* *a²*

Trombi in D. *f* *NB.*

Timpani in A. E. *f*

Violino I. *ff*

Violino II. *ff* *3*

Viola. *ff* *3*

Violoncello I. *ff* *3*

Violoncello II & Contrabbasso. *ff* *a²* *3*

NB. The leaps from *g* to *d²* are very difficult for trumpet 2; at that period, however, no other arrangement was possible to allow of two players playing together. Trumpet 1 would be effective enough.

73. Beethoven, Symphony in A, No. 7. (Mov. II.)

Allegretto.

Flauti. *ff* ^{a2.}

Oboi. *ff* ^{a2.}

Clarinetti in A. *ff* ^{a2.}

Fagotti. *ff* ^{a2.}

Corni in E. *f* ^{a2.}

Trombi in D. *f* ^{a2.}

Timpani in A. E. *f*

Violino I. *ff*

Violino II. *ff*

Viola. *ff* ^{a2.}

Violoncello & Contrabasso. *ff* ^{a2.}

p

p

p

p

p

74. Beethoven, Symphony in Cmi. (Last mov.)

Allegro.

Flauto picc. *p dolce* *cresc. poco a poco* *f*

Flauti. *p dolce* *cresc. poco a poco* *p cresc.* *f*

Oboi. *cresc. poco a poco* *f*

Clarinetti in C. *cresc.* *f*

Fagotti. *a2* *p cresc.* *f*

Contrafagotto. *f*

Corni in C. *a2* *p dolce* *cresc. poco a poco* *f*

Trombi in C. *p cresc.* *f*

Trombone alto e tenore.

Trombone basso.

Timpani in C. G. *p cresc.* *f*

Violino I. *f* *p cresc. poco a poco* *f*

Violino II. *f* *p cresc. poco a poco* *f*

Viola. *f* *p cresc.* *f*

Violoncello. *f* *p cresc.* *f*

Contrabasso. *f* *p cresc.* *f*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

f

f

p

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

p *cresc. poco a poco*

75. Wagner, 'Siegfried'. (Siegfried setzt sein Horn an' und stürzt sich in das wogende Feuer, welches sich, von der Höhe herabdringend, nun auch über den Vordergrund ausbreitet.)

(Hellstes Leuchten der Flammen.)

Flauto piccolo. *ff*

Flauto I. *ff*

Flauto II & III. *ff*

Oboe I & II. *ff*

Oboe III. *ff*

Corno inglese. *ff*

Clarinetto I in B \flat . *ff*

Clarinetto II & III in B \flat . *ff*

Corno I & II in F. *ff*

Corno III & IV in F. *ff*

Corno V-VIII in F. *ff*

Fagotto I & II. *ff*

Fagotto III. *ff*

Clarinetto basso in A. *ff*

3 Trombi in A. *ff*

Tromba basso in E \flat . *ff*

3 Tromboni. *ff*

Trombone contrabasso. *ff*

Timpani in F. *ff*

*) Campanetta. *f*

Triangolo (with drums sticks) *f*

Piatti. *mf*

6 Arpa. *ff*

Violino I. *f*

Violino II. *f*

Viola. *f*

Violoncello. *f*

Contrabasso. *f*

ff stacc.

stacc.

f pizz.

*) Campanella (Glockenspiel). D. & F. 7

The musical score on page 69 is a complex orchestral arrangement. It is organized into three systems of staves. The first system (top) includes woodwinds (flutes, oboes, bassoons, clarinets), brass (trumpets, trombones, tuba, euphonium), and strings. The second system (middle) features strings and woodwinds. The third system (bottom) includes strings and woodwinds. The score is written in a key signature of two flats (B-flat major or D-flat minor) and a 3/4 time signature. It contains various musical notations, including treble and bass clefs, key signatures, time signatures, and dynamic markings such as *ff* (fortissimo) and *f* (forte). Performance instructions like *(in As.)* and *arco* are present. The score is divided into three measures, with the first measure ending in a repeat sign. The second measure begins with a *ff* dynamic marking. The third measure features a *f* dynamic marking and a *arco* instruction. The score is a page from a larger work, as indicated by the page number 69 in the top right corner.

76. Beethoven, 'Symphony Pastorale. Bars 64-83. (Scene at the Brook.)

Andante molto mosso.

Musical score for the first system of the 'Scene at the Brook' section. The score is for a full orchestra and includes the following parts: Flauto, Oboi, Clarinetti in B♭, Fagotti, Corno in B♭, Violino I, Violino II, Viola, Violoncello, and Contrabasso. The tempo is marked 'Andante molto mosso'. The key signature is one flat (B♭) and the time signature is 12/8. The first measure of each part is marked *pp*. The Flauto part has a long note with a fermata. The Violino I part has a continuous sixteenth-note pattern. The Violoncello part has a 'pizz.' marking.

Musical score for the second system of the 'Scene at the Brook' section. This system continues the orchestral parts from the first system. It features various dynamics including *cresc.* (crescendo) and *p* (piano). The Flauto part has a melodic line with a *cresc.* marking. The Violino I part continues its sixteenth-note pattern. The Violoncello part has an 'arco' marking. The system concludes with a *p* dynamic.

The first system of the musical score consists of nine staves. The top staff features a melodic line with slurs and accents. The second staff has a similar melodic line with some rests. The third staff is empty. The fourth staff contains a melodic line with slurs. The fifth staff has a melodic line with slurs. The sixth and seventh staves are part of a grand staff, with the sixth staff (treble clef) containing a complex, fast-moving melodic line and the seventh staff (bass clef) containing a similar complex line. The eighth and ninth staves are part of a grand staff, with the eighth staff (treble clef) containing a melodic line and the ninth staff (bass clef) containing a melodic line with slurs.

The second system of the musical score consists of nine staves. The top staff has a melodic line with slurs and accents. The second staff has a melodic line with slurs. The third staff contains a long, sustained chord with a piano (*p*) dynamic marking. The fourth staff is empty. The fifth staff has a melodic line with slurs. The sixth and seventh staves are part of a grand staff, with the sixth staff (treble clef) containing a complex, fast-moving melodic line and the seventh staff (bass clef) containing a similar complex line. The eighth and ninth staves are part of a grand staff, with the eighth staff (treble clef) containing a melodic line and the ninth staff (bass clef) containing a melodic line with slurs. The word *cresc.* appears in the second, third, fifth, sixth, seventh, and eighth staves of this system.

The first system of the musical score consists of ten staves. The top two staves are for the vocal line, with the first staff containing a melodic line and the second staff containing a lower vocal line. The next three staves are for the piano accompaniment, with the first staff being the right hand and the second and third staves being the left hand. The bottom three staves are for the double bass and cello parts, with the first staff being the double bass and the second and third staves being the cello. The score includes various musical notations such as notes, rests, and dynamic markings. Dynamics include *p* (piano), *cresc.* (crescendo), and *f* (forte). There are also markings for *arco* (arco) and *tr.* (trill). The key signature is one flat (B-flat major or D minor), and the time signature is 4/4.

The second system of the musical score continues the composition from the first system. It consists of ten staves, maintaining the same instrumental and vocal parts. The notation includes various musical symbols such as notes, rests, and dynamic markings. Dynamics include *p* (piano) and *f* (forte). The key signature remains one flat, and the time signature is 4/4.

The first system of the musical score consists of ten staves. The top two staves are vocal lines with lyrics. The third staff is a melodic line. The fourth staff is a bass line. The fifth and sixth staves are piano accompaniment, with the fifth staff being the right hand and the sixth staff being the left hand. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. Dynamic markings such as *p* and *cresc.* are present throughout the system.

The second system of the musical score continues the composition. It features the same ten-staff structure as the first system. The vocal lines continue with lyrics. The piano accompaniment includes complex rhythmic patterns and dynamic markings such as *p*, *cresc.*, *pizz.*, and *arco*. A *simile* marking is used in the third staff. The system concludes with a *cresc.* marking in the final measure.

The first system of the musical score consists of three measures. It features a complex arrangement of staves including vocal lines and piano accompaniment. The key signature has two flats (B-flat and E-flat). The first measure is marked with a forte (*f*) dynamic and includes the instruction *bd.* (basso continuo). The second measure transitions to a piano (*p*) dynamic and is marked *dolce*. The piano accompaniment in the lower staves includes a *cresc.* (crescendo) leading to a forte (*f*) dynamic, followed by a *dim.* (diminuendo) to piano (*p*). The piano part features intricate sixteenth-note patterns. The third measure continues the piano accompaniment with a *dim.* marking and includes *pizz.* (pizzicato) instructions for the lower strings.

The second system of the musical score consists of three measures. It continues the musical material from the first system. The piano accompaniment in the lower staves is marked *pp* (pianissimo) and includes the instruction *arco* (arco). The piano part continues with sixteenth-note patterns. The vocal lines in the upper staves are marked *pp* and feature melodic lines with various ornaments and phrasing. The key signature remains two flats. The system concludes with a sharp sign (*#*) in the upper staves, indicating a key change to one flat (F major or D minor).

Oboe.

Clarinetto in A.

Corno I & II in E.

Corno III & IV in E.

Violino I.

Violino II.

Viola.

Violoncello.

Siegfried.

Contrabasso.

pp

p *f*

Vol. 1, 2 and 3.

5 and 6.

tr.

(Siegfried lauscht mit wachsender Theilnahme einem Waldvogel in den Zweigen über ihm)

a 4.

a 4.

p *f* *p* *f* *dol.*

pp cresc.

pp cresc.

f

f

f

f

Allegretto pastorale.

This musical score is for Liszt's 'Les Préludes', No. 78, 'Allegretto pastorale'. It is a full orchestral score with piano accompaniment. The score is written in 6/8 time and consists of 16 measures. The instruments and their parts are as follows:

- Flauto I:** Melodic line with dynamics *f* and *a 2.*
- Flauto II & III:** Melodic line with dynamics *f* and *a 2.*
- Oboi:** Melodic line with dynamics *f* and *a 2.*
- Clarineti in C:** Melodic line with dynamics *f* and *a 2.*
- Fagotti:** Melodic line with dynamics *f* and *a 2.*
- Corno I & II in C:** Harmonic support with dynamics *cresc.* and *f*.
- Corno III & IV in C:** Harmonic support with dynamics *cresc.* and *f*.
- Trombi in C:** Harmonic support with dynamics *cresc.* and *f*.
- Trombone basso & Tuba:** Harmonic support with dynamics *f* and *a 2.*
- Timpani in C. G.:** Rhythmic accompaniment with dynamics *f*.
- Arpa:** Harmonic accompaniment with dynamics *cresc.* and *f*.
- Violino I:** Melodic line with dynamics *cresc.*, *f*, and *marc.*
- Violino II:** Melodic line with dynamics *cresc.*, *f*, and *marc.*
- Viola:** Melodic line with dynamics *cresc.*, *f*, and *marc.*
- Violoncello:** Melodic line with dynamics *cresc.* and *f*.
- Contrabasso:** Melodic line with dynamics *cresc.* and *f*.

79. Beethoven, Symphony in A. (Mov. III.)
Assai meno presto.

Flauti.
ff

Oboi.
ff

Clarinetti
in A.
ff

Fagotti.
ff

Corni
in D.
ff

Trombi
in D.
ff

Timpani
in A. F.
ff

Violino I.
ff

Violino II.
ff

Viola.
ff

Violoncello
&
Contrabasso.
ff

fp

p

p

p

p

p

Sehr schnell.

Flauto I & II. *ff* *mf* *p*

Flauto III. *ff* *mf* *p*

Oboe I & II. *ff* *mf* *p*

Oboe III. *ff* *mf* *p*

Clarinetto I & II in A. *ff* *mf* *p*

Clarinetto III in A. *ff* *mf* *p*

Corno I & II in E. *ff* *p*

Corno III & IV in E. *ff* *p*

Fagotto I & II. *ff*

Fagotto III. *ff*

Tromba I in E. (bestimmt) *p*

Tromba basso in D. (bestimmt) *mf* *p*

Trombone I. (bestimmt) *p*

Violino I. *f* *mf* *p* *p*

Violino II. *f* *mf* *p* *p*

Viola. *f* *mf* *p* *p*

Siegmund. Sieg - mund heiss' ich. und Sieg - mund bin ich! Be - zeug' es dies

Violoncello. *f* *p* *p*

Contrabasso. *f*

81. Schumann, Symphony in Dmi. Introduction to 4th movement.
Langsam. (♩ = 52)

Flauti.

Oboi.

Clarineti in B♭.

Fagotti.

Corno I & II in F.

Corno III & IV in D.

Trombi in F.

Tromb. alto & Tromb. tenore.

Tromb. basso.

Timpani in D. A.

Violino I.

Violino II.

Viola.

Violoncello.

Contrabasso.

This musical score is for a string quartet and piano. It consists of 14 staves. The top four staves are for the string quartet (Violin I, Violin II, Viola, and Cello/Double Bass). The bottom six staves are for the piano (Right Hand and Left Hand). The score is in 3/4 time and features a key signature of one sharp (F#). The music is characterized by a steady, rhythmic accompaniment in the strings and piano, with a dynamic range from piano (*p*) to fortissimo (*f*). The word "string." is written above the first and tenth staves. The dynamic marking "cresc." (crescendo) is used frequently throughout the piece, indicating a gradual increase in volume. The piano part features a prominent triplet pattern in the right hand, which is mirrored in the string parts. The overall texture is dense and rhythmic.

Lebhaft.

Flauto picc.

Flauto I.

Flauto II.

Oboe I.

Oboe II.

Oboe III.

Clarinetto I in A.

Clarinetto II in A.

Clarinetto III in A.

Corno inglese.

Clarinetto basso in A.

3 Fagotti.

Corno I & III in E.

Corno II & IV in E.

Corno V & VII in E.

Corno VI & VIII in E.

Tromba II & III in E.

Tromba basso in D.

Violino I.

Violino II.

Viola.

Violoncello.

Contrabasso.

This page of musical notation consists of 18 staves. The top 12 staves are grouped by a brace on the left and contain complex rhythmic patterns, primarily sixteenth-note runs and chords, with dynamic markings such as *f* and *dim.*. The bottom 6 staves continue the piece, featuring more complex rhythmic patterns and articulation like *div.*. The notation is dense and includes various musical symbols such as slurs, accents, and dynamic markings.

83. Beethoven, Symphony No. 9. (Mov. III.)

Andante moderato.

Flauti. *p dolce*

Oboi. *p dolce*

Clarineti in B \flat . *p dolce*

Fagotti. *p dolce*

Corni I. II. in B \flat basso. *p*

Corno III & IV in E \flat . *p*

Timpani in F. B \flat . *p*

Violino I. *p dolce*

Violino II. *pizz.*

Viola. *pizz.*

Violoncello & Contrabasso. *a 2. pizz.*

cresc.

p

See also the following.

- R. Schumann**, symphony No. 2; *C*-major, movement IV. Close.
 " " No. 3; *E^b*-major, movement I, commencement; movement IV close.
 " " No. 4; *D*-minor, movement I close; movement IV, commencement and close.
 " overture 'Genoveva'. Ed. Peters, p. 21, 22, 23, 27, 28, 29.
Cherubini, overture 'Medea'. Commencement and close.
 " " 'The Water Carrier'. Close.
 " " 'Anacreon'. Close.
Beethoven, " 'Egmont'. Ed. Peters, score; p. 12, 13.
 " " 'Fidelio'. Close.

Flauto picc.

Flauti.

Oboe I & II.

Oboe III.

Clarinetto I & II in B7.

Clarinetto III in B7.

Corno inglese.

Corno I & II in F.

Corno III & IV in F.

Corno V & VI in F.

Corno VII & VIII in F.

Fagotto I & II.

Fagotto III.

Tromba I & II in F.

Tromba III in F.

Tromba basso in D.

Trombone I & II.

Trombone III.

Trombone contrab.

Tuba contrabasso.

Timpani in F.C.

Violino I.

Violino II.

Viola.

Siegfried.

Violoncello.

Contrabasso.

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This page of a musical score, numbered 86, contains multiple staves of music. The upper section features several string staves (Violins I, Violins II, Violas, and Cellos/Double Basses) with long, sustained notes and dynamic markings of *dim.* (diminuendo). The lower section includes woodwind staves (Flutes, Oboes, Clarinets, Bassoons) and piano staves (Right and Left Hand). The piano part features a complex rhythmic pattern with many sixteenth notes. Dynamic markings include *ff* (fortissimo) and *p* (piano) in addition to *dim.*. The score is written in a key signature of one flat and a time signature of 4/4.

After what has already been said I find it unnecessary to enter further into detail as to the scoring of contrapuntal, church or secular, music; the young composer can find endless examples for study, a few of which are given here.

Organ music to arrange: Bach prelude (48 Preludes and Fugues), No. 4, and fugue from the fantasia No. 12, *g*-minor arranged by Abert. Bach, Passacaglia *c*-minor; toccata in *F* arranged by Esser; Chaconne arranged by Raff; original orchestral music, see Mozart *C*-major (Jupiter) symphony (4th mov.); and *Il Flauto magico* overture. For chorus and orchestra, almost every ancient and modern oratorio contains examples.

Church music for soli, chorus and orchestra.

Bach's *Passions*, Christmas oratorio; Handel *The Messiah*, *Judas Maccabæus*, *Saul*, *Israel* and other oratorios; Mozart *Requiem*; Beethoven *B*-minor mass; Cherubini's *Requiem c*-minor and *d*-minor; Mendelssohn Oratorios, *St. Paul*, *Elias* and *Hymn of Praise*; Kiel *Requiem*; Berlioz *Requiem*; Brahms *A German Requiem*; Verdi *Requiem*; Becker *Mass in B \flat -minor*; Draeseke *Requiem*; v. Herzogenberg *Requiem*.

Secular works.

Haydn, *The Creation*, *Seasons*; Beethoven, *Choral fantasia*, 9th symphony, last movement; Schumann, *Faust*, *Paradise and the Peri*, *Requiem for Mignon*, *Pilgrimage of the Rose*; Mendelssohn *Loreley* finale; *Die Walpurgisnacht*; Gade, *Springs Message*, *Erl-Kings Daughter*, *Comala*; Raff, *Die Tageszeiten*, *Concertante*; Rheinberger *Christofforus*; Bruch, *Odysseus*, *Lay of the Bell*, *Schön Ellen*, *Achilleus*; Hofmann, op. 30 *Märchen von der schönen Melusine*; Nicodé, *Das Meer*, *Symphonic Ode* for solo, male chorus and orchestra; Reinecke, *Hakon Jarl* for solo, male chorus and orchestra; Wagner *Das Liebesmahl der Apostel* for male chorus and orchestra; Heinrich Zöllner op. 30, *Columbus* for solo, male chorus and orchestra.

