THE CHIMES AND HARP IN ORGAN PLAYING

BY GORDON BALCH NEVIN

3

OLIVER DITSON COMPANY

The CHIMES and HARP in ORGAN PLAYING

With Ten Specially Scored Pieces

TRANSCRIBED AND EDITED

By

GORDON BALCH NEVIN

AUTHOR OF First Lessons on the Organ A Primer of Organ Registration Swell Pedal Technic Twenty-five Advanced Pedal Studies



1.25

OLIVER DITSON COMPANY

THEODORE PRESSER CO., DISTRIBUTORS 1712 Chestnut Street Philadelphia

Made in U. S. A.

Copyright MCMXXXVIII, by Oliver Ditson Company International Copyright Secured

FOREWORD

Among the developments of recent years that have increased the popularity of the organ are the imitative percussive devices—Chimes and Harp.

The inclusion of one or both of these accessories has become accepted practice on all but the smallest organs, and hence there has come to be a need for instruction in the best use of these percussives. This book is offered with the sincere hope that it may provide the student with the needed direction.

Data and photographs furnished by J. C. Deagan, Inc. and the Skinner Organ Company are gratefully acknowledged.

Hordon Bakh Nevry

CONTENTS

	Page
Тне и	se of Chimes
Pieces using Chimes:	
1.	Folk-song <i>Edvard Grieg</i> , Op. 38, No. 2 5
2.	Clair de lune 8
3.	Prelude Frédéric Chopin, Op. 28, No. 2012
4.	Spiritual (Steal away to Jesus)15
5.	Prelude in E major
The use of the Harp	
Pieces using the Harp:	
1.	The Brooklet
2.	Élégie
3.	Liebestraum No. 1
4.	Out of sadness
5.	Reverie



The Chimes, as constructed for organ use, are metal tubes so proportioned as to produce, when struck by padded hammers, a tone similar to that of the bells which for centuries have hung in the towers of churches and cathedrals.

Any consideration of the desirable usage of organ Chimes must first of all recognize this fact—that bells were never intended to be accompanied by other instruments. From their simplest grouping, the "peal" of three bells, to their most complex organization, the carillon, of thirty to seventy bells, the "chimes" have been and are a separate, individual, complete musical entity. The quality of tone, the peculiar system of harmonic partials involved, the "clash" resulting from overlapping tones, all tend to place the chimes in a class by themselves. Scientifically, at least, they must be regarded as unsuitable for use in normal instrumental groups.

The very quality of bell tone is unique and individual, an analysis showing a most unusual series and arrangement of partials. Messrs. J. C. Deagan, Inc., acknowledged experts on all types of chimes and tuned percussives, give the most important partials of a cast bell of conventional bell shape as follows:



of which C, third space, is the "strike note" or partial which determines the pitch recognized by the ear. In this series of partials the minor third, E-flat, is of interest, for only in cast bells does this minor third appear. It is wholly absent in all other musical tones, whether produced by pipes, strings, tuned bars, or tubular chimes.

Because of cost and space required, Chimes in the organ are never of the traditional bell shape; tubular Chimes have been developed for this purpose, and are a very satisfactory substitute. As produced by various manufacturers they show considerable variation in construction, i.e., in weight, diameter, thickness of wall, as well as composition of metal. Obviously, there is a corresponding variation in quality of tone. Some Chimes are rather discordant when accompanied by normal organ tones; others show a minimum of discordancy. In any event there is always some degree of uncongeniality between Chime and pipe tone, and there are certain problems which must be considered if artistic results are to be achieved.

Representative of the best in organ Chimes are the Deagan Class A Cathedral Chimes. The makers have furnished an analysis of the most essential partials present in these Chimes, and it is given as follows:



This tabulation shows three partials above the "strike note," all concordant with the partials of normal pipe tone. Below the strikenote we find two E-naturals, a minor sixth and an eighteenth (the latter very weak), which are not discovered, to any extent at least, in normal pipe or string tone, and which must therefore be regarded as to some degree dissonant.

We may safely accept such Chimes as introducing the very minimum of discordancy when played with organ accompaniment. However, there are on the market some Chimes which introduce other partials, and in some cases there is a greater degree of discordancy involved.

In any event, the organist is confronted with the problem of reconciling a quality of tone characterized by a special and peculiar system of partials with the normal tones of the organ. The Chimes must be accepted as we find them with their virtues, limitations, and involved problems, and we must study how best to employ them.

Judged by the reaction of audiences, the most popular material for the use of Chimes is found in hymn-tunes; it may not be the most artistic, but it certainly is inevitable. Your congregation will expect, from time to time, a hymn-tune on the Chimes. What expedients, then, can we adopt, in order to make the results as artistic as possible? First, we may call attention to the very solemn and impressive effects possible in "giving out" hymn-tunes on Chimes alone, without accompaniment of any kind. This is a powerful device and one that few organists have the courage to try, but the results are amazing. No other single effect will so instantly command attention from an impassive audience. It is therefore a device which should be employed only infrequently: once in three or four weeks would be quite often enough.

Generally it will be necessary to create or include an accompanying harmony, and in doing so, there are four expedients which will be found helpful. These are:

- 1. Low volume level of accompaniment.
- 2. Neutral or dull tones for accompaniment.
- 3. Tremolo used on accompaniment.
- 4. Accompaniment shifted higher or lower.

1. Low volume level, i.e., a much softer than normal accompaniment, has the effect of *minimizing* the clash of chime and pipe partials. This *lessening* of the clash is all that results from a *soft* accompaniment, considered without regard to tone quality, but it is definitely a help. Many organists use far too much volume in accompanying Chimes.

2. Neutral or dull-toned accompanimental stops are extremely valuable, and this fact needs to be more widely realized. A soft Gedeckt, or Stopped Diapason, with swell-shades nearly or entirely closed is really the most satisfactory accompanying tone for Chimes, because the very lack of harmonics in such stops permits the bell harmonics to assert themselves without conflict. The idea held by some players that Viols, Salicionals, Vox Humanas, etc., are the proper accompanying quality is utterly wrong, physically, and by test of the ear, for, obviously, the less heard of the open pipe series of harmonics the less clash will there be with the special series of harmonics of the Chimes. Gedeckts produce the smallest percentage of harmonic development of all organ stops and therefore introduce the very minimum of discordancy when supporting Chimes. Robertson, in the Practical Treatise on Organ Building, calls attention to the fact, familiar to tuners, that a Gedeckt is much less offensive than a Gamba when both are equally out of tune. This is directly in line with the

advice here given, and is based on the same fundamental principle. Hence, use Gedeckts or the duller-toned Flute stops in accompanying Chimes.

3. The effect of the Tremolo on accompanimental stops is also good, the valve tremolo especially so, fan tremolos to a lesser degree, in that it slightly shifts the pitch alternately sharp and flat. While this might at first glance seem to introduce a third variable in the equation, in practice it will be found to have considerable value because it tends to delude the ear as to the exact pitch of one of the two systems of partials which we aim to reconcile. The undulation in the one series of partials baffles the ear to some extent and tends to prevent it from fully realizing the antipathy of the two harmonic systems.

4. One of the most helpful devices is to shift the chord work one octave higher (or occasionally lower) than the tessitura of the Chimes. Considerable improvement usually results from this simple treatment and it is strongly recommended where the Chimes are of a clashing quality.

Any or all of these expedients may be used simultaneously, and in most cases it will be found that at least two of them will be desirable in the direct playing of hymn-tunes with Chimes.

In the preceding paragraphs we have been considering the simple and direct statement of hymn-tunes, or similar material, on Chimes. There are other ways in which the Chimes may be *introduced* in the playing of hymn-tunes, anthems and even in many organ pieces which do not expressly demand their use.

We have abundant precedent for the introduction of occasional bell notes (single strokes or simple figures) in the orchestral scores of Verdi, Meyerbeer, Rossini, Wagner, and other composers. Knowing the solemnity achieved by a single bell note in even such hackneyed numbers as the "Miserere" from *Il Trovatore*, we may well surmise that a like use of Chimes in sacred music can be quite impressive.

Select the tune "Seymour" as an example, and introduce a single stroke of the Chimes at the final measure of each four-bar sentence, in this manner:



Or select such a tune as "Pax Dei," and add two Chime notes at the final measure of each sentence, as follows:



This is a simple but very effective treatment, and can be managed even by players unversed in theory, for the notes introduced by the Chimes are already present in the harmony of the hymn-tunes; it becomes merely a matter of selection. Many anthems, and many organ pieces, especially those pieces with hymn-like trio sections, offer opportunity for this treatment. Organists who have pursued a course of study in counterpoint and harmony will at times discover opportunities for expanding this simple treatment. A complete obbligato on the Chimes, of a very simple contrapuntal nature, will be most effective. This treatment produces fine results, but requires skillful manipulation.



Passing-notes may occasionally be added, as at the points marked * in the example just given.

Unless the player is a very expert *impro*viseur, it will be wise to prepare this type of treatment in advance, if necessary writing the Chime notes upon the printed page. Very many or rapidly moving passing-notes had best be avoided lest a blurred effect result. Both in this instance and in general, effective use of Chimes presupposes notes of ample duration, limited motion, few chromatics.

The player will occasionally encounter organ Chimes to which have been fitted "dampers" devices built into the action to stop the tone when the keys are released. Only a very small percentage of organ Chimes are so equipped, and the wisdom of so building Chime actions is certainly open to question. A damping action is wholly foreign to bell technic and to the aural effect of bells. For centuries the human race has been hearing bells overlapping, tone piling up on tone. Instinctively we expect bells to exhibit a diminuendo from the moment of the stroke until the tone becomes inaudible and any device which interrupts this fading characteristic must be regarded as artificial and abnormal in effect. However, if you are so unfortunate as to play an organ with Chimes so equipped, it will be necessary to employ a very close legato touch on all Chime passages, holding the keys depressed for the full duration of each and every note; anything less than a perfect legato under these conditions will aggravate the uncharacteristic effect of damper-equipped Chimes. With undamped Chimes, the touch used may show any degree of detachment convenient to the

player. With all normal Chimes we will have, and should expect to have a reasonable amount of tone-prolongment and overlapping—this being the natural characteristic of all bells. Hence we should play them in a reasonable manner, avoiding passages of rapidly-moving notes unless some special and unique effect is intended. Finally, do not overuse the Chimes, no matter how urgent may be the pleas of your congregation and friends. One minute in any one service is quite enough, indeed almost too much. The Chimes provide a very beautiful special effect, and one of great value in popularizing the organ, but the fact remains that it is a special effect, and hence calls for restraint and moderation.

There follow five pieces in which the Chimes are utilized.

FOLK-SONG



















CLAIR DE LUNE

Prepare Swell: Strings, Flute, Oboe Great: Chimes Choir: Concert Flute Pedal: Bourdon, Ch. to Ped.

FRANCIS THOMÉ Transcribed by Gordon Balch Nevin





















10









PRELUDE



FRÉDÉRIC CHOPIN, Op. 28, № 20 Transcribed by Gordon Balch Neviñ







Note: This composition may be played upon two-manual organs by substituting the Swell (with suitable registration) for the indicated Choir organ passages.



















77673- 3

SPIRITUAL (STEAL AWAY TO JESUS!)







Copyright. MCMXXXVIII, by Oliver Ditson Company International Copyright Secured













PRELUDE IN E MAJOR

















View of an Organ Harp

The Harp, or Harp-Celesta, in organ usage is an accessory developed from the Celesta of orchestral association, the invention of which is accredited to M. Auguste Mustel of Paris, in 1886.

The orchestral Celesta is brilliant and piquant in tone. Perhaps the most familiar example of its use is Tchaikovsky's *Dance de la Fée Dragée* from the *Nutcracker Suite*. It has also been used by Puccini, Leoncavallo, and many of the French composers.

The Harp-Celesta consists of a chromatic series of metal bars, each provided with a tuned resonator and struck by a padded hammer. The action which affects the hammers is not unlike the action of the pianoforte, but its capacity for rapid repetition is decidedly inferior.

Tonally, the Harp-Celesta is unquestionably one of the most appealing developments in the gamut of the modern organ. It is quite safe to say that no other feature surpasses it in popular appreciation. The very name (Harp) by which it has become known has helped it to gain the affection of the public, and we shall for the sake of brevity adopt this nomenclature in discussing its use.

The compass of the Harp in the best examples is full five octaves, sixty-one notes, sometimes reduced, for economy, to four octaves, fortynine notes. The pitch is 4', and this has led to the custom, happily becoming standard, of wiring in a sub-pitch, controlled by a separate stop: this sub-pitch of course produces an 8' register, the lowest octave of which, however, is missing. The provision of both 8' and 4' control to the Harp is found to be of great value, even though the 8' is of short compass.

From the angle of tone quality, the lower two or three octaves of most organ Harps have been given a delightfully liquid smoothness, the top octave or two retaining some of the metallic "ping" of the original Celesta.

The blending properties of the best examples of organ Harp are so remarkable that the player will discover virtually no problems involved: indeed, the problems in this detail are as few concerning the Harp as they are numerous with the Chimes. Excepting a few of the more pungent reeds, such as English Horn, Orchestral Oboe, and some examples of the ordinary Oboe, the organ Harp will either blend or pleasantly contrast with practically the whole complement of the softer tones of the organ. With the Flutes, the smoother Strings, the various Celestes, Vox Humana, Clarinet, and even with the smoother Diapasons, the Harp will be found quite congenial. Therefore, no especial advice is needed on combinational use.

In using the Harp, the player adopts a clavier-technic very similar to some branches of pianoforte technic. Arpeggios and passagework are treated exactly as when played on the pianoforte. Chords are usually played "broken," the rapidity or slowness of the arpeggiation depending upon the tempo and frequency of chords per measure. While a squarely-attacked, non-arpeggiated chord is possible and at times desirable, it will be found that the arpeggiated chord is more in the idiom of the organ Harp, just as is the case with its orchestral prototype. This implies a clean "mezzo-staccato" touch and plenty of finger action, particular attention being given to rhythmic exactness: i.e., if there are eight notes allotted to a beat, those eight notes must be evenly spaced so as to occupy just that length of time, with no distortion or faulty distribution.

The matter of a suitable pedal bass calls for a word of comment. Very few organ Harps produce an even dynamic range: usually the lower octave or so is quite a little weaker than the remaining compass. Because of this characteristic, many organists make a practice of adding a more or less legato bass part, using such soft registers as the 16' Gedeckt, 8' Gedeckt, or both stops together. In a great majority of cases this will be a satisfactory procedure, and might also be called a necessity whenever the outline of the bass of the harmony possesses any melodic outline or counter-melodic value. In these cases a reinforcing pedal tone is absolutely essential.

However, when the Harp is used in an antiphonal manner, i.e., playing an occasional chord or two at intermittent times between phrases which are given to the traditional tones of the organ, it will generally be found more effective to omit the pedal bass for sake of contrast. A suggestion of this type of use is shown in the following example:



In playing arpeggiated chords on the Harp the beginner is usually uncertain whether to play the pedal notes so that they coincide with the first note of the arpeggiation, or with the final (top) note. Both treatments are possible, but in most cases the latter treatment, where the pedal note is struck simultaneously with the final or top note of the arpeggiation, will be decidedly the most satisfactory. This treatment is illustrated in the following example:



Obviously the player must feel the rhythmic pulses, or counting, as falling upon the top notes of the chords, just as is the case when such chords are played upon the pianoforte or the orchestral harp; he therefore plays his pedal notes at the point of completion of the arpeggiated chord, thereby synchronizing the rhythmic pulse at the top and bottom of the arpeggiation. We might say that examination of a number of player-roll recordings of prominent organists has fully confirmed this advice.

The student should, however, avoid confusing the treatment of *arpeggiated chords* with the treatment of measured arpeggios such as those shown in the following example:



When a pedal bass is deemed advisable with this type of passage-work it will, of course, be played so as to coincide with the pulse of each arpeggio, and no problem is involved.

As only a relatively small proportion of organ pieces explicitly demand the use of the Harp, we may very properly search for opportunities to use this accessory. In the modern type of lighter composition for the organ we shall find many such opportunities. Many pianistic figures and devices have been borrowed for use in modern organ composition, and many of these gain tremendously when shifted from the sustained tone of pipes to the percussion



will be found in hundreds of organ pieces. Any such figure, when not too rapidly chromatic, presents an opportunity for the Harp.

Rapid chromatics are not, in the case of the



though entirely feasible on the keyboard, are really not audibly proper on the Harp. Such figuration would be more suitable for the Flute or Violin than for the Harp. To keep in the idiom of the instrument we must have harmony which is mostly diatonic, with chromatics employed only when they do not succeed each other too rapidly.

Here, as in the consideration of Chimes, the questionable value of dampers calls for a word of comment. In rare cases dampers are fitted unalterably to organ Harps, an iniquitous practice that is rapidly being dropped; in these rare cases the player must endeavor to keep as many keys depressed as possible so that the bars may exhibit their normal diminuendo from the instant of striking until they fade into inaudibility. Otherwise the effect will resemble that of the Xylophone rather than the Harp or Celesta.

In most cases we find Harps installed either without dampers or, when they are provided, quality of the Harp. Such accompanimental figures as these:



orchestral harp, properly in the idiom of the instrument, and the same criticism applies to the organ Harp. Such passages as these:



an "on-off" tablet or buttons are added; this latter arrangement is really the ideal system, but adds somewhat to the cost. For use in connection with the type of pianoforte figurations that we have just instanced the dampers should be "off"— permitting the bars to ring freely until they fade away—as is their natural characteristic. Only with the Harp undamped can we simulate the natural percussion-followedby-fading effect of the orchestral harp. Later, in showing the percussive use of the Harp when mixed with stop combinations, we shall find that dampers can be of some value.

As we search for opportunities to use the Harp as an added effect, we will find occasional passages in which the Harp may be used in a manner that is not only similar to the introduction of Chime notes for accent purposes, but also partakes of the function of that dainty little wizard of the symphony orchestra, the triangle. Observe the following example:—



Rhythmically you add substantially the same thing as would result from a delicate use of the triangle, i.e., accent, but with the benefit of definite pitch instead of the uncertain harmonic series of the triangle. Countless opportunities for this rhythmic use of the Harp may be discovered—a usage which adds piquancy and sparkle, but which should not be overworked.

An occasional possibility is the slow trill well up in the highest register, as in the following example:



This also is distinctly a special effect, and should be used only infrequently.

To revert to the more general use of the Harp, let us call attention to an opportunity that will be found present in many sacred solos and anthems. One of the favorite rhythmic patterns used in these works is of this nature:



Played upon the pianoforte this type of accompaniment is effective enough, but upon transference to the organ a serious lack of vitality is discovered; unless the organist resorts to a trick effect with the Crescendo Pedal, there is an almost total lack of accent on the first counts of measures one and three. The incisive percussion of the piano does not carry over to the organ with any degree of success. However, the player may easily fill these hollow spots in the accompaniment, introducing Harp chords as follows:



For the best results it will be found desirable to place the Harp chords either higher or lower than the chords which they precede, as has been shown in the example, and preferably upon other inversions of the chords; this, and the difference of tone quality, avoids weakening the melodic outline of the accompaniment as the player finds it provided. This device "fills" what many players describe as "holes in the harmony," adds rhythmic point to a construction that is not usually effective on the organ, and provides a splendid opportunity to make use of the Harp.

In the preceding lines we have considered the Harp as used to contrast with other combinations of stops, and as played upon a clavier separate from these combinations. We now consider another method of use. In this method the Harp is directly combined with certain of the softer registers of the organ, and to a large extent loses its identity as a Harp imitation, but adds to the soft registers a mild percussive effect. Especially pleasing is the addition of the Harp to the softer Flute tones for use on accompanimental figures. Even with the simplest chord progressions, as in the following example, it lends a delightful, though delicate, accent.



Accompanimental figures, such as the following, take on new life and verve when played upon soft registers plus Harp.



It might also be said that a clever organist will sometimes find a chance for the Harp during the brief pauses that occur in almost every type of church service, as for instance when the ushers are returning to the rear of the church, or the minister is going from the lectern to the pulpit. A few broken chords at a slow tempo, with the swell-shades partly closed, on the Harp alone, will gain immediate and respectful attention. The following example will suggest an appropriate type of material.



As we complete these suggestions for the use of the Harp, a word of caution is in order: avoid overusing the Harp. It is true that the Harp can safely be used more frequently than the Chimes; nevertheless, it cannot with impunity be forced to assume the role of "man of all work." It is, in the opinion of many brilliant organists, the most valuable single accessory that has been added to the modern organ, and it can well be featured at several times during a service or recital—either alone, in contrast with stop effects, or mixed (for percussion) directly with stop combinations; but it should not be too persistently heard, nor for too great a length of time. We can safely say that the Harp is a most versatile *accessory*, and that time given to the study of its possibilities will be time well spent.

There follow five pieces in which the Harp is utilized.

THE BROOKLET

Prepare Swell: Strings, Vox Humana, Flute Great: Harp (Erzahler ad lib.) Pedal: Gedeckt 16-8

Second Romance

CHARLES GOUNOD Transcribed by Gordon Balch Nevin

























28


















Prepare Swell: Bourdon, Flute, Piccolo Great: Harp-Celesta Choir: Soft 8' Pedal: Gedeckt 16' & 8'

SERGE YOUFEROFF Transcribed by Gordon Balch Nevin











Sw. to Ped.















LIEBESTRAUM Nº1*

Prepare Swell: String solo combination Great: Harp-Celesta Choir: Soft 8' String or Flute Pedal: Gedeckt 16' & 8'

FRANZ LISZT Transcribed by Gordon Balch Nevin









* Abridged for offertory use

Copyright, MCMXXXVIII, by Oliver Ditson Company International Copyright Secured

















77677-

















OUT OF SADNESS

40





Note:- Except where indicated, the Harp chords are to be played "square-edged" (non-arpegg.)

Copyright, MCMXXXVIII, by Oliver Ditson Company International Copyright Secured





















77679 - 4

















.

