Maximizing Success for the Orchestral Harpist

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- I. General resources (see resource list on pg. 4-6)
 - a. Organizations, websites and journals
 - b. Books
- II. About the instrument
 - a. Brief history (see pg. 11-12)
 - b. Lever harps (non-pedal or folk)
 - i. Strings and numbering
 - ii. Chromatic limitations
 - c. Pedal harps
 - i. 2000+ moving parts
 - ii. Tuned in Cb
 - iii. Pedal and fork mechanisms
 - iv. Strings: wire, gut, and nylon
 - d. Used vs. new harps: pros and cons
 - i. New harps
 - 1. Known history
 - 2. Warranty
 - 3. Free 1-year regulation
 - 4. More expensive, and appreciate every year
 - 5. Where to purchase:
 - a. From manufacturer
 - b. Harp Retailers
 - ii. Used harps
 - 1. Lesser cost
 - 2. Uncertain history
 - 3. Harps have relatively short lifespan (less than 100 yrs)
 - 4. Appreciate in cost, so you might be paying more than the original owner paid for the instrument
 - 5. Where to purchase:
 - a. From classified ads
 - b. Individuals (check AHS Chapter Newsletter)
 - c. Retailers of used harps (some are Certified Pre-Owned)
 - e. Accessories

- i. Padded cover (3-piece set and/or trunk is optional)
- ii. Tuning key (preferably rubber, long-handled)
- iii. Electronic tuner with calibration settings
- iv. Pick-up mic
- v. Extra strings, wire cutter, and string-ends
- vi. Harp Cart (for pedal harps) and adjustable bench
- vii. Optional accessories:
 - 1. Dusting cloth and polish
 - 2. De-humidifier for storage location
- f. Maintenance, care, and tuning
 - i. Insurance
 - 1. Merz-Huber
 - 2. Anderson Insurance (www.harpinsurance.com)
 - ii. Regular tuning, and down-tuning when not used
 - iii. Regulations
 - iv. Safe storage
 - 1. In a temperature/humidity-regulated room
 - 2. In a low-traffic area
 - 3. Out of direct sunlight (use a cover if it is)
 - 4. Near a corner or wall

III. Finding harpists

- a. Contact local harp teachers
 - i. Local Universities/Colleges
 - ii. AHS website teacher's directory
 - iii. Local AHS chapters or regional mailing lists
- b. Recruit new players
- IV. Repertoire considerations (see AHS Education Project 2000 handout, pg. 7-10)
 - a. Orchestra:
 - i. A brief history
 - ii. Our most-common excerpts
 - iii. What if no harp part exists?
 - 1. Using parts from other instruments, especially piano
 - 2. Combining a treble and bass instrument (such as vln and bass)
 - 3. Writing a new part and adding effects, such as glissandi
 - 4. Source: Writing for Pedal Harp by Inglefield and Neill
 - iv. What if the part is too difficult?
 - v. Items to avoid in making or choosing arrangements or compositions
 - 1. Repeated notes
 - 2. Extensive chromaticism—use enharmonics
 - 3. Sudden key changes
 - 4. Keys with many sharps
 - b. Harp Ensemble

- i. Repertoire
- ii. Pedal and lever harps may be combined
- iii. Conducted or lead by one harpist while performing
- c. Chamber Music
- d. Maximizing rehearsal benefits
 - i. Early arrival for tuning
 - ii. Preparation of pedal markings
 - iii. Counting rests and the importance of cues
 - iv. Visual placement within the ensemble

V. Acoustic considerations

- a. A quiet instrument, prone to buzzing when overplayed
- b. Placement within the ensemble and visual considerations
- c. Amplification
- d. An overview of idiomatic effects
 - i. Arpeggios
 - ii. Harmonics
 - iii. Glissandi
 - 1. fingers
 - 2. nails
 - 3. flat palm
 - 4. muffled
 - iv. Sol Xylo
 - v. Tuning Key Slides
 - vi. Knocks and Wire gong
 - vii. Pdlt (*près de la table*)
 - viii. Finger muffles/ Pedal Slides

Resources

Organizations, Websites, and Journals

The American Harp Society (and Journal) www.harpsociety.org

- Website contains contact list for area teachers, chapters, and Regional Directors.
- Journal includes classified ads for used harps.

The Harp Column www.harpcolumn.com

- Classified ads for used harps are listed online and in bi-monthly publication.
- Practical information for harpists of all levels.

The World Harp Congress www.worldharpcongress.org

- International organization which holds gatherings of international harpists.
- Biennial publication focusing on scholarly topics, and promoting contemporary harp composers.

The Folk Harp Society (and Journal) www.folkharpsociety.org

• Journal of the International Society of Folk Harpers and Craftsmen.

Practical Advice for Harpists, Educators, Composers, and Directors

A Harp in the School: A Guide for School Ensemble Directors and Harpists Edited by Chelcy Bowles

• Available through ASTA's bookstore at www.astaweb.com.

On Playing the Harp

By Yolanda Kondonassis

• A practical and clear guide with basic information for beginners.

Harp Care, Maintenance, and Repair

A Guide for Harpists: Care, Maintenance and Repair of the Pedal Harp

By Carl Swanson

• A thorough how-to guide for pedal harp repair. Includes information about how to select a used harp.

Troubleshooting your Lever Harp

By David Kolacny

• A user-friendly guide for troubleshooting common maintenance issues of lever harps, and a guide for replacing strings.

Harp Notation and Scoring

Harp Scoring

By Stanley Chaloupka

• A thorough explanation of standard harp notation for pedal and lever harps.

Writing For the Pedal Harp (includes CD)

By Ruth Inglefield and Lou Anne Neill

• A guide to pedal harp notation and effects.

Harp History

Harps and Harpists (includes CD)

By Rosalyn Rensch

• This is the most complete source of harp history which is currently available. Includes detailed bibliographies for each historical topic.

Nineteenth- and Twentieth-Century Harpists

By Wenonah Milton Govea

• An insightful overview of the most influential harpists from the past two centuries, containing brief biographical information and works-lists.

Ensemble Repertoire Resources

AHS Education Project 2000 (www.harpsociety.org/resources/education2000.html)

• Contains a graded list of repertoire for school ensembles (grades 1-12) and publisher information

The Harp in the Orchestra: A Reference Book for Harpists, Teachers, Composers, and Conductors

By Beatrice Schroeder Rose

 Offers suggestions for standard orchestral harp excerpts, and practical advice for the orchestral harpist.

Principal harp: A Guidebook for the Orchestral Harpist (includes CD)

By Sarah Bullen

 Includes fingerings and enharmonic re-spellings for standard orchestral harp parts and several cadenzas.

Harp Method Books

Complete Method for Harp

By Henriette Renié

Offers an in-depth analysis of technique, as it relates to solo and orchestral repertoire.
 These two volumes are intended as a resource for harp teachers, rather than students.
 Includes drawings for the articulation of various techniques, and several orchestral excerpts. Exercises range from beginner to advanced levels.

Harp Olympics, Preliminary Round-Stage 4

By Susann McDonald and Linda Wood Rollo

• A playful approach to exercises, theory, and solos which appeal to younger students. This method purposefully avoids specific discussion of technique, so it may be used with any teaching method. At the end of each "Stage," students must complete a "Marathon" test before entering the next stage.

Method for the Harp

By Lucile Lawrence and Carlos Salzedo

• A thorough discussion of harp technique, including several photographs. Fifteen Preludes at the end of the *Method* demonstrate various techniques. Emphasis is placed on new effects of the twentieth century and specific hand and arm position for execution. Preludes are of an intermediate Level.

Metodo per Arpa (available only in Italian)

By Maria Grossi

Although this volume is available only in Italian, its organization clearly pertains to the
establishment of new techniques individually. Clear photographs are included, but a
teacher would need to specifically describe these techniques to the pupil. Exercises of a
beginner to intermediate level by Grossi and Pozzoli are included.

Thumbs Up!

By Kathy Bundock-Moore

• Beginning method for the adult or college-aged beginning harpist.

Universal Method for the Harp

By Bochsa and Oberthür

• This Method approaches harp playing from a theoretical point of view, beginning with a discussion of rhythm and the notation of pitches upon the staff. A discussion of body position is included in addition to Forty Progressive Studies for the Harp by Bochsa. Exercises are of a late intermediate level.

Beginning Solo Harp Repertoire (in addition to the above Methods and Etudes)

ABC's of Harp Playing

By Lucile Lawrence

Beginner's Harp Book, Vol. 1-2 (available with DVD)

By Phyllis Schlomovitz

Colorful Adventures for the Harp

By Bonnie Mohr

First and Second Harp Books

By Betty Paret

Fun from the First, Vol. 1-2

By Samuel Milligan

Graded Recital Pieces, Vol. 1-5

By Susann McDonald and Linda Wood-Rollo

Old Tunes for New Harpists and Thirty Little Classics

By Mildred Dilling

Pop n'Easy Collections (Nutcracker Ballet Selections, Children's Favorites, Popular

Classics, and Popular Holiday)

By Eleanor Fell

Suzuki Harp School, Vol. 1-3 (with CD's)

Adapted and Arranged by Mary Kay Waddington

Tiny Tales, Vol. 1-2

By Carlos Salzedo

Some Retailers of Harps, Music, Strings, and Accessories:

Lyon & Healy Harps: 800-621-3881, www.lyonhealy.com and www.harp.com

Salvi Harps (Harp World): 888-420-4227, www.harpworldinc.com

Venus Harps: 773-278-4810, www.venusharps.com

Vanderbilt Music Company: 800-533-7200, <u>www.vanderbiltmusic.com</u>

Melodie's Music (in Houston): 800-893-4277, www.folkharp.com

Sources for Finding Used Harps:

Important Note: Always view used harps in person before purchasing.

Lyon & Healy Harps (Certified pre-owned): www.lyonhealycpo.com

The Harp Connection: www.harpconnection.com

The Harp Column (classified ads online and in publication): www.harpcolumn.com

American Harp Journal (classified ads in publication): www.harpsociety.org

AHS Education Project 2000

Listing of Published Harp Parts for School Ensembles (Grades 1–12) Compiled by Wendy Kerner Lucas for the American Harp Society Available at www.harpsociety.org/resources/education2000.html

| | | narpsociety.org/res | | | T - | T |
|---|--|--|--|----------------------|---------------------------|-----------------------|
| Name of Piece | Composer/ Arranger | Publisher and info | Orchestration | Ensemble Level | Lever or Pedal | Harp Part Level |
| Adagietto From Symphony No. 5 | Mahler, Gustav Arr. C.L. Gruselle | Highland/Etling A div. Of Alfred #17350 | String Orchestra, Harp | 3-Medium | Either | 2 |
| Andante | Guilmant Arr. Conley | MSB Publishing #CB178 | Concert Band | 3-Medium | Pedal | 4 |
| Berceuse and Finale from Firebird Suite | Stravinsky/ Isaac | Warner Bros. #CO00137 | Complete Orchestra | 2-3 Medium | Pedal | 31/2 |
| Carol of the Bells | Leontivich- Wihousky Arr. Hayman | Carl Fischer #C167 | Full Orchestra | 4-Medium Advanced | Pedal | 3 |
| Celtic Suite | Fishburn, Kathy L. | Wingert-Jones Music, Inc. #303032 | String Orchestra 8-8-5-5-Harp | 2-Medium Easy | Either | 3 |
| Dance of the Tumblers | Rimsky- Korsakov, arr. S. Dackow | Ludwig Music LLE-89 | Full Orchestra (also available Str. Orch.) | 2-Medium Easy | Either | 21/2 |
| Elegy | Beckham | Wingert-Jones Music, Inc. #10403227 | String Orchestra 8-8-5-5-Harp | 3-Medium | Either | 3½ |
| English Suite | Fishburn, Kathy L. | Wingert-Jones Music, Inc. #3030122 | String Orchestra 8-8-5-5-Harp | 3-Medium | Pedal or adv. Lever | 4½ |
| Fiesta Processional | Ward, Robert | ECS #7.0122 | Concert Band | 2-21/2 | Pedal | 41/2 |
| Finale from Symphony No. 2 in C | Tchaikovsky, Arr. Sandra Dackow | Ludwig Music LLE-79 | Full Orchestra | 1-Easy | Either | 31/2 |
| Four Abstractions (2-4) | Ward, Robert | ECS 2,3: #7.0231 4: #70232 | Concert Band | 2-3 | Pedal | 4 |
| Glorious Sounds of Christmas | Arr. Dwight Gutafson | Highland Etling 18290 | Full Orchestra | 4-Medium Advanced | Pedal | 4 |
| Greensleeves | Traditional, Arr. Marcia Dickstein | Fatrock Ink, Distributed by Theodore Presser #494-01936 | String Orchestra, Harp | 2-Medium Easy | Pedal | 4 |
| Iridium | Stamp, Jack | Kjos #JO-2002C | Full Orchestra | 5+ Advanced | Pedal | 4 |

| Mission Song | Gazda | Kjos #SO165c | String Orchestra | 2- Medium | Either | 2 |
|--|---------------------------------------|--|---|----------------------|--------|------|
| Moscow Nights | Soloviev- Sedoy Arr. Penoy | Kjos #O-1062B | Full Orchestra | 4-High School | Pedal | 4 |
| Mother Ginger from "Nutcracker Suite" | Tchaikovsky, Arr. Sandra Dackow | Ludwig Music LLE-88 | Full Orchestra | 2-Medium Easy | Either | 21/2 |
| O Mio Babbino Caro | Puccini arr. Sandra Dackow | Ludwig Music STRO-61 | String Orchestra, Harp | 1-Easy | Either | 3 |
| Of Fire and Ice | Iannacone, Anthony | ECS #260a | Concert Band | 4-5 Advanced | Pedal | 5 |
| Overture to Nabucco | Verdi arr. Sandra Dackow | Ludwig Music LLE-80 | Full Orchestra Also available String Orch. – STRO-75 | 3-Medium | Either | 3 |
| Overture on Jewish Themes | L. Gearhart | Shawnee Press J 0051 | Full Orchestra | 3 - Medium | Pedal | 2 |
| Overture to Rienzi | Wagner arr. Sandra Dackow | Ludwig Music LLE-91 | Full Orchestra | 3-Medium | Either | 3 |
| The Passing Bell | Benson, Warren | ECS #1302 | Concert Band | 4-5 Advanced | Pedal | 4 |
| Pavane | Fauré arr. Gearhart | Shawnee Press J 0041 | Full Orchestra 2-1-2-2 1-1-1-0 Strings, optional Harp | 3- Medium | Pedal | 31/2 |
| Prelude on an Early American Folk Hymn My Shepherd Will Supply My Need | Smith, Claude T. | Wingert-Jones Music, Inc. #3033032 | String Orchestra 8-8-5-5-Harp | 3 – Medium | Either | 5 |
| Prophet's Dance | Mosier, Kirt | Kjos #O-1071F | Full Orchestra | 5-High School | Pedal | 4 |
| Scenes from Carmen- Suite No. 1 | Bizet/ Alshin | Warner Bros. # CO 00203 | Complete Orchestra | 3-4 Medium | Pedal | 31/2 |
| Three Gymnopedies | Satie, Erik Arr. Megan | ECS #256a | Concert Band | 3-4 – Junior High | Pedal | 3½ |
| Trepak from "Nutcracker Suite" | Tchaikovsky, Arr. Sandra Dackow | Ludwig Music LLE-78 | Full Orchestra Also available Str. Orch. STRO –28 – Intermed. | 2-Med. Easy | Either | 21/2 |

CHOIR AND HARP:

| | ANDHAM | | 0 1 mp ** | | T | 1. |
|--------------------|------------------|-------------------------|-------------------------|-------------|--------|------|
| A La Nanita | Arr by Roger | Mark Foster Music: | SATB, Harp | High School | Pedal | 4 |
| Nana | Folstrom | c/o Shawnee MF0 | | 4 | | |
| | | 547 | | | | |
| Carol of the | Wood, Dale | Sacred Music Press | SATB, Harp, | High School | Pedal | 5 |
| Manger | | 10/1520 S | Flute | 2 | | |
| | | c/o Lorenz | | | | |
| Crystals | Paul W. Whear | Ludwig Music | Treble Voices, 3 | High School | Pedal | 41/2 |
| | Poems: Conner | L 9153 | Flutes, Harp and | 31/2 | | |
| | | | Percussion | | | |
| El Rorro | Mexican Carol | Plymouth Music | SATB, Harp | High School | Pedal | 4 |
| (This Babe) | Arr. Jeffrey Van | Co. | • | 4 | | |
| | • | PDW 1001 | | | | |
| Friendly Beasts | Arr. Lee R. | Plymouth Music | Three Part Treble, | Middle or | Pedal | 4 |
| j | Kesselman | Co. | Harp | High School | | |
| | | HL-217 | г | 3 | | |
| Frostiana | Thompson, | ECS #1450 | SATB/SSA/TBB | 4 – High | Pedal | 5 |
| Tiobuulu | Randall | 200 11730 | And Orchestra | School | 1 Caul | |
| God Rest Ye | Jackson Berkey | SDG Press | SATB, Harp | High School | Pedal | 5 |
| Merry, | Jackson Berkey | SDG 11ess SDG 98-102 | Percussion, Bass | 4 | 1 Cuai | |
| Gentlemen | | 3DU 90-102 | reicussion, Dass | 4 | | |
| He is Born | Cabulta Danna | The Sacred Music Pre | CATD Home | High School | Either | 31/2 |
| He is boili | Schultz, Donna | 10/1245S | SATB, Harp, Oboe and | U | Either | 372 |
| | G. | | | 3 | | |
| T T 1 D .1 | W 1 D 1 | c/o Lorenz | Percussion | TT: 1 C 1 1 | D 11 | 41./ |
| I Wander By the | Wood, Dale | The Sacred Music Pre | , 1 | High School | Pedal | 41/2 |
| Sea | | No. S-205 | flutes or recorders | 2 | | |
| | | c/o Lorenz | | | | |
| Il Est Ne | Jackson Berkey | SDG Press: | SATB Chorus, | High School | Pedal | 41/2 |
| | | SDG 95 – 101 | String Bass, Snare | 5 | | |
| | | | Drum, Hp | | | |
| Jesu, Son Most | Jackson Berkey | SDG Press: | SATB Chorus, | High School | Either | 3-4 |
| Sweet and Dear | | E WW 1160 | Soprano Solo, | 5 | | |
| | | | Harp | | | |
| Lute Book | Henry Kihlken | Carl Fischer | Three Part Mixed: | High School | Pedal | 4 |
| Lullaby | | | SAB | 4 | | |
| | | | Harp | | | |
| Sans Day Carol | Stroope, Z. | Choristers Guild | Two part treble | Junior High | Either | 4 |
| | Randall | #CGA-549 | voices, harp | or High | | |
| | | c/o Lorenz | • | School 2 | | |
| Stars are for | Delmonte, | Choristers Guild | Unison or SA, | Junior High | Pedal | 5 |
| Those Who Lift | Pauline | #CGA-117 | Harp, optional | or High | | |
| Their Eyes | | c/o Lorenz | cello | School 2 | | |
| Still, Still Night | Jackson Berkey | SDG Press: | SATB Chorus, | High School | Pedal | 5 |
| , | 201110 | SDG 95-101 | Alto Solo, Harp | 5 | | - |
| This Child, This | Daniel Gawthrop | Dunstan House | Chorus, Harp and | High School | Pedal | 3 |
| King | Zamer Sawanop | #DH 9401 | organ | 3 | 1 Cau | |
| What Can I Give | Barham, Sue & | Choristers Guild | Unison Treble | Level – 1 - | Either | 4 |
| Him | Terry | CGA 786 c/o Lorenz | Omson Hedic | Elementary | Limei | + |
| What Sweeter | Fink, Michael | | Charue Harr | | Pedal | 4 |
| | rink, michael | ECS #2771 | Chorus, Harp | High School | redai | 4 |
| Music | <u>l</u> | <u> </u> | | 3-4 | | |

Levels of school players – grades 1 - 12:

1 - Easy 2- Medium Easy 3- Medium 4 - Medium Advanced 5- Advanced

PUBLISHER INFORMATION:

Alfred Publishing Co. PO Box 10003, 16380 Roscoe Blvd, Suite 200, Van Nuys, CA 91410

818-891-5999

Dunstan House

c/o ECS Publishing 138 Ipswich Street Boston, MA 02215 800-777-1919 ECS Publishing 138 Ipswich Street Boston, MA 02215 800-777-1919

Carl Fischer 62 Cooper Square New York, NY 10003 800-762-2328 212-777-0900

Neil A. Kjos Music Company 4380 Jutland Drive San Diego, CA 92117 800-797-KJOS 619-270-

9800

Lorenz 501 East Third Street, P.O. Box 802, Dayton, OH 45401-0802 513-228-

6118

800-444-

1144

Ludwig Music 557 East 140 St. Cleveland, OH 44110-1999 800-851-1150 / 216-851-

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c/o. Shawnee: 49 Waring Drive Delaware Water Gap, PA 18327 800-962-8584

MSB Publishing Co. PO Box 2219341 Chantilly, VA 20153 703-802-6790

Plymouth Music 170 NE 33rd St Fort Lauderdale, FL 33334 954-563-1844

SDG Press c/o Masters Music PO Box 810157 Boca Raton, FL 33481 561-241-

6169

Shawnee Press, Inc: 49 Waring Drive Delaware Water Gap, PA 18327 800-962-8584

Theodore Presser, Inc. 1 Presser Place Bryn Mawr, PA 19010 610-525-3636

Warner Bros. 15800 N.W. 48th Ave. Miami, FL 33014 800-327-7643

Wingert Jones Music PO Box 419878, 2026 Broadway, Kansas City, MO 64141 800-258-

WJMO

Dated September, 2004

A Brief History of the Harp

I. The Ancient Harp

The earliest harps were probably small ten-stringed instruments, very different from what is often played today. Much of our knowledge about these instruments stems from pictorial evidence from tomb walls, which appeared as early as 4000 BCE. There is evidence that harps played a large role in the religious and secular cultural life of ancient Egypt around 3000 BCE, when the harps were often bow-, spoon-, or spade-shaped, and had six to twelve strings. The instruments and their players held important roles; their music may have accompanied the telling of histories at various functions, or were perhaps used to accompany religious chants. The harps were held in much the same way as today's classical harps, though they were much smaller.

Stories about Irish (Celtic) harps began appearing in literature around the 12th century. Celtic harps emerged in two forms, according to historians: "one greatly bold and quick, the other soft and pleasing." The first refers to a metal strung harp which was unique to the Irish culture during the medieval period. The latter refers to a smaller triangular harp, strung with braided horsehair. Later, it was strung with gut strings and would become the ancestor of today's concert harps.

II. The Western European Harp

The greatest difference in form between ancient harps and those used in Western Europe resulted from the addition of a string arm and a pillar (or column) to the soundbox of earlier harp models. The earliest representation of this modification in European harps stands as late as the 14th and 15th centuries, when harpists were often depicted as angelic figures or as the center of attention in fashionable court-like settings.

As harp construction continued to adapt to current musical trends between the 17th and 18th centuries, a great deal of experimentation with different types of harp construction and stringing occurred. Through such experimentation, cross-strung harps and triple-strung harps developed, as musicians continued to adapt to the developing repertoire. In the 1720's, by Jacob Hochbrucker in Bavaria made the greatest advancement for the modern harp. He created a hook-and-pedal mechanism, which allowed the harp to produce two pitches per string. The pedals were called "single-action," as they could only change each string by a half step. By moving the pitch-alteration mechanism for changing sharps and flats from the hand-operated levers to the foot-operated pedals, harpists were allowed greater freedom in repertoire, and virtuosic players soon emerged.

This development opened an entirely new world of chromatic literature for harpists of the time. The popularity of the instrument spread to Paris, where it was adored by members of the French court and the fashionable society. Even Marie Antoinette played the harp. Thus, harps from this time became exquisite works of art, ornamented in the rococo style with gilded carvings on the columns and hand-painted flowers on the sounding boards.

III. The Development of Chromaticism and the Double Action Harp

During the late part of the 19th century, several experimental harps, such as the Pleyel harp emerged, which was described as a *harpe chromatique sans pédales*, or a chromatic harp without pedals. This model resembled the cross-strung style of harp that was famous during the Renaissance in Spain. This Pleyel harp became popular in France and Belgium, and one of the most notable compositions for this style of harp was Debussy's *Danse sacrée et danse profane* of 1904. The pedal harp transcription of this work, made by Henriette Renié, holds an important place in harp repertoire.

Harpists and harp makers continued to develop the mechanism and sound of the harp. During the early 1800's, Sébastien Érard began to experiment with an earlier mechanism of pedals, created by Georges and Jacque-Georges Cousineau in 1782. The Cousineau harp used two rows of "crutches" to shorten the vibrating harp string. The Cousineau harp used two rows of pedals with seven pedals each, totaling *fourteen* pedals. In 1810, Érard devised and patented his double-action harp, which used a system of seven pedals, each with two notches for the "double action," whereby each string could create three pitches (flat, natural and sharp). Érard's mechanism has been slightly modified, and is still in use in pedal harps today.

IV. Modern Advances for the Harp

Beginning in the 1980's the harp showed signs of following a new age of technology. The electric harp is one of the newest advances, for it allows the harp sound to be electronically synthesized and distorted, in much the same way as an electric guitar or piano. With a pick-up microphone on each string and a processor, the variety of sounds that can be produced is nearly endless.

