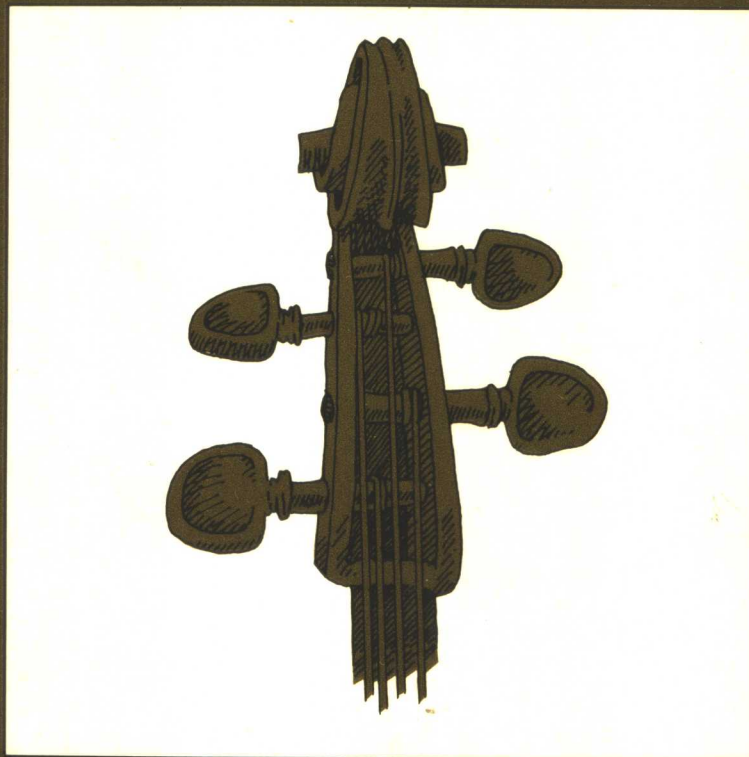


PLAYING AND TEACHING THE **STRINGS**

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PLAYING AND TEACHING THE STRINGS

Vincent Oddo

Northeastern Illinois University

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Playing and Teaching the Strings
Vincent Oddo, Northeastern Illinois University

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EDITOR'S FOREWORD

Instruction in instruments is an important part of the training of future instrumental music teachers. Part of their future success as teachers depends on their knowledge of instruments other than their major instrument. Learning "minor" or "secondary" instruments has two parts. One is a basic ability in playing the instrument—fingerings, embouchure, playing position, and so on. The other part is a knowledge of how to teach the instrument to students at the beginning and intermediate levels. These two aspects of instruction in instruments are by no means contradictory. However, sometimes students in such classes or lessons concentrate almost exclusively on learning to play the instrument, which leaves them deficient in teaching knowledge. In other cases, such instruction contains little playing of music, and therefore the learning that results is largely a "head" knowledge based on limited practical understanding.

The WADSWORTH SERIES IN CLASS INSTRUMENTAL METHODS seeks to bring together the best of both the playing and teaching sides of the secondary instrument instruction. These books contain material for the future instrumental teachers to learn to play. There is also infor-

mation about how to teach the instrument to beginning students.

The WADSWORTH SERIES books are basically ensemble methods books. Since there is seldom time in undergraduate music education curriculums for instruction on individual instruments, like instruments are learned at the same time in the same class. Because of the variety of instruments available, more interesting music can be performed.

Playing and Teaching the Strings by Vincent Oddo of Northeastern Illinois University was selected for inclusion in the WADSWORTH SERIES IN CLASS INSTRUMENTAL METHODS because it contains the features of information about teaching as well as material to play. Also, it includes all relevant string instruments. Of equal importance, however, is the fact that it is a tested class-string methods textbook that is based on years of experience in teaching such classes. It is specifically designed with the future instrumental-music teacher in mind. In short, it is well suited to meet the needs of a secondary string-class textbook.

Charles R. Hoffer
Indiana University

PREFACE

The training of a string teacher is largely dependent upon instructional materials that combine both musical and practical information. In addition, the future string teacher must have organized information and experiences in both playing *and* teaching the instruments.

Strings provides future instrumental music teachers, whether string players or not, with a balanced presentation of:

1. Basic instruction in playing the violin, viola, cello, and string bass; holding the instruments correctly; basic left- and right-hand techniques; tuning, care, and maintenance of the instruments and bows, etc.; and
2. Suggestions, materials, and teaching strategies for creating and sustaining an effective string program in the schools.

Of these two aspects, the second has too often been treated superficially, with the acquisition of important practical information left generally to chance.

Strings differs from other class instrumental methods texts in that it presents an extensive and balanced presentation of information on *both* the musical and practical aspects of string instruction. In doing so, it brings together under one cover a variety of material—material available only through laborious and time-consuming research into a number of sources.

In addition to the instructional materials on how to play and teach the instruments, here are just a few of the unique features contained in *Strings*:

The physics affecting sound production and tone control
Bowling and fingering conventions
Exercises for editing bowings and fingerings
Making minor repairs and adjustments

Evaluating and selecting instruments, music, equipment, and accessories

Along with these, the book also has a comprehensive Appendix containing graded materials, source materials, bibliography, films, and other supplementary information.

An important feature of *Strings* is its ensemble approach. This format affords students in the string methods classes the opportunity to observe the different types of problems associated with individual instruments, to perform a variety of representative string chamber music, and to explore those musical aspects that contribute to basic musicianship: intonation, phrasing, balance, articulation, and other performance concepts.

The seven chapters follow a logical progression, one that closely approximates the learning/teaching sequence encountered in a classroom setting. Chapters 1 and 2 emphasize the formulation of basic left- and right-hand techniques. Chapters 3 and 4 build on this foundation and introduce intermediate techniques. Chapter 3 was specifically designed to provide materials that the students could use to develop added facility on their own, thus saving valuable classtime. Chapters 5 and 6 further solidify the techniques of previous chapters while introducing additional concepts. Throughout all chapters there are liberal suggestions for teaching these concepts and techniques. The remaining chapter presents a thorough overview of “on-the-job” types of information.

Finally, the author is aware that no one volume can adequately contain a complete study of even one instrument, let alone be definitive when both the musical and practical aspects of teaching the strings are combined. The main purpose of *Strings* was to set forth in a systematic and balanced approach those materials that will provide the knowledge that is essential to the success of the prospective string teacher.

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A special gratitude is extended to some of my former teachers, colleagues and friends who contributed indirectly to the completion of this book: Samuel Arron, Charles Schell, Patrick Gardner, Leon Stein, and William Primrose.

Finally, I am especially indebted to Charles Hoffer of Indiana University for his advice, encouragement, and many valued contributions.

Vincent Oddo

TO THE STUDENT

More than any other family of instruments, the strings possess an almost unlimited vocabulary of expressive effects. From the unaccompanied instrument to the symphony orchestra, the sound of the strings is generally accepted as one of the most beautiful in music. Their dynamic range and richness of color are almost unequaled, and their emotional power can never be underestimated. Their enormous breadth of musical expressiveness stretches from the exotic to the sublime, from the transparent to the majestic.

These qualities have made the strings, in a variety of combinations, an attractive medium for the great composers. While strings form the backbone of chamber and symphonic music, their unique timbres also make them compatible with keyboard, wind, brass, and percussion instruments—individually or in ensembles. Their capacity

for agility, coupled with the loveliness of an indefinitely sustainable sonority, appeals to a variety of emotions.

Recognizing that these qualities exist as the means of expression for the string musician, their preservation can be sustained solely through the continual development of young musicians whose knowledge, attitudes, and playing abilities are equal to the highest levels of string playing in America. The contribution you can make to help realize this goal is largely dependent upon your ability to: (1) cultivate and maintain interest in strings, (2) demonstrate and teach the essentials of string playing, (3) develop in your students attitudes toward and an awareness of the unique characteristics of string music, and (4) administer your string program. The materials presented here follow a sequence leading to the attainment of these abilities.

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Chapter 1

FIRST APPROACHES TO PLAYING AND TEACHING THE STRINGS

PARTS OF THE INSTRUMENTS AND BOWS

Instruments

Figure 1-2 (p. 2) illustrates and identifies the parts that are common to all string instruments—with the obvious exceptions of the chin rest for the violin and viola, the end-pin for the cello and string bass, and the mechanical tuning mechanism for the string bass.

There are many similarities between the four members of the string family, but when the instruments are compared side by side, their differences become very apparent. Before we begin to make these comparisons and note differences, we will have to master the language used to describe the parts of the instruments. Knowing the correct term to use when describing the parts of the instruments (as well as the bow) can be very helpful in other ways. In teaching someone else to play any instrument, it is important to be able to refer correctly to certain parts. For example, terminology is necessary when illustrating or correcting the position of the thumb on the *neck*, finger position on the *fingerboard*, bow distance from the *bridge*, and so forth. Also, use of the correct term is essential when directing a repairman to a specific problem if any repairs or adjustments are necessary.

Violin/viola. The soprano (violin) and alto (viola) members of the string family are illustrated in Figure 1-1. (The differences between bows are discussed in the next section of this chapter.) Since most of the dimensions of the violin and viola are direct expansions and contractions of an ideal pattern established by the early seventeenth-century Italian instrument makers, a casual observer can not immediately see the differences between the two unless the instruments are compared directly.

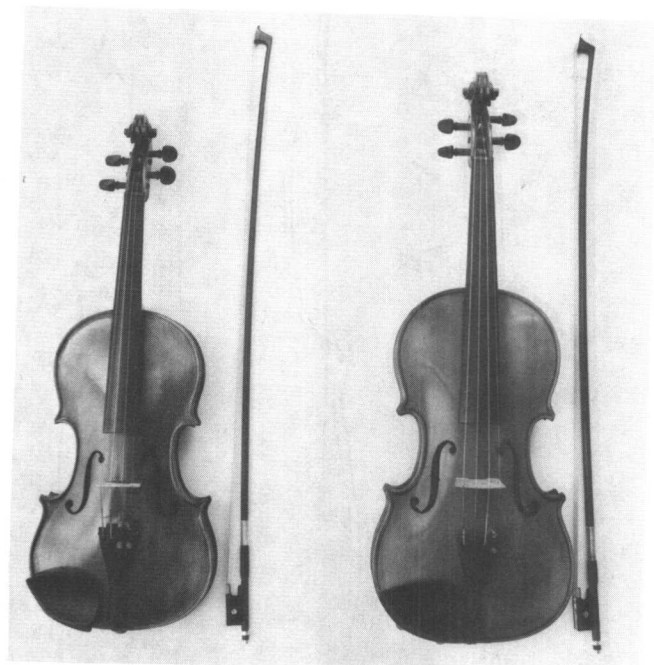
In comparing the instruments, it is obvious that the viola is slightly larger than the violin in all its dimensions. The subtler visual differences lie in the width of the ribs, width of the lower bout, and sometimes the shape of the pegbox where it joins the neck, just below the fingerboard nut.

Cello/bass. The tenor (cello) and bass members of the string family are illustrated in Figure 1-3. Here the differences in the dimensions are very real: The string bass is almost twice

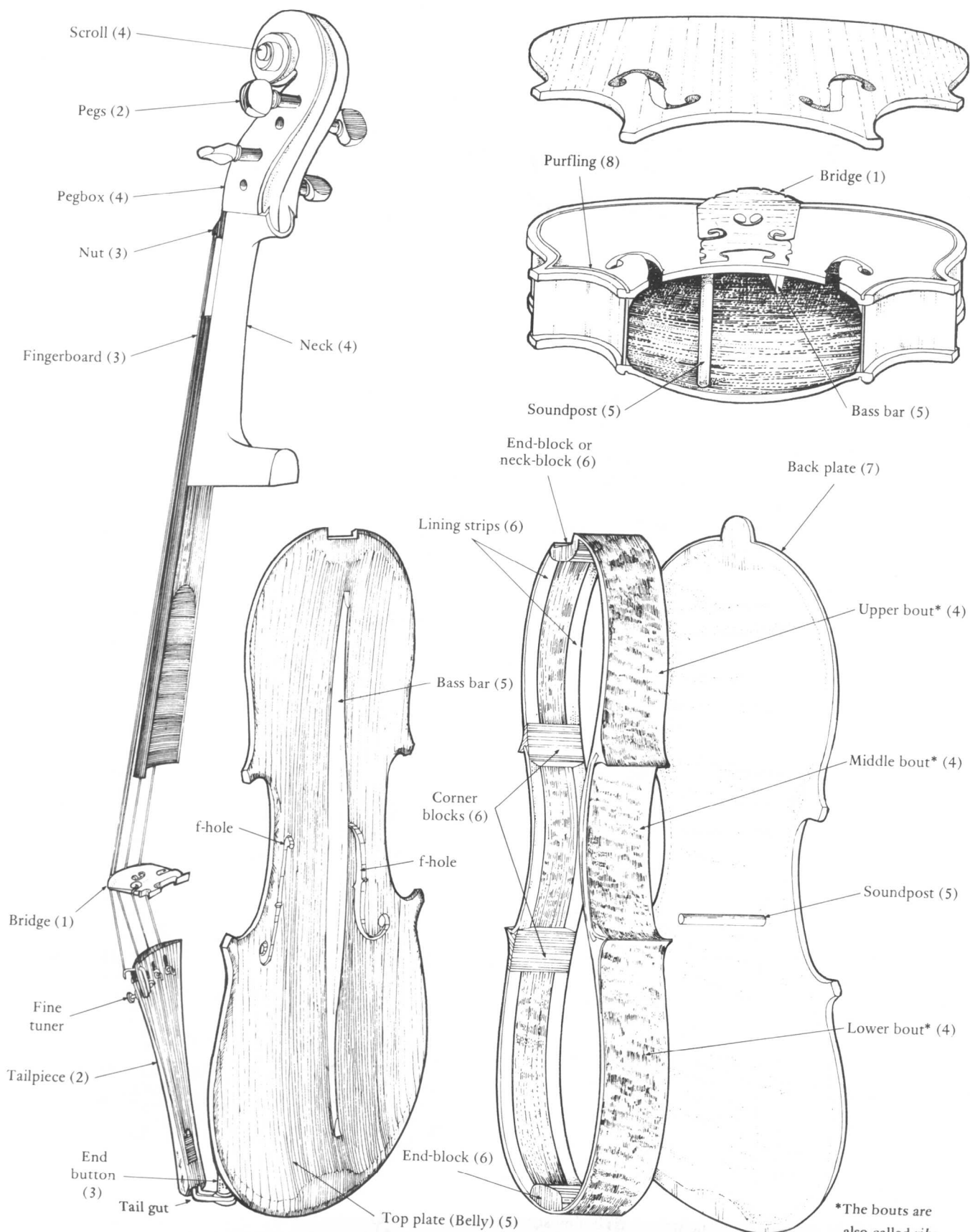
the size of the cello. But closer observation will reveal some other visual differences. The shoulders of the upper bouts of the cello are rounded; on the bass they slope. The cello—like the violin and viola—has its strings tuned with pegs and string tuners; on the bass this is done with a mechanical tuning mechanism (see Figure 1-4). A profile view of the bass and cello may sometimes show a difference in the amount of curvature in the backs of the instruments.

Bows

The bows, like the instruments, evolved through several stages over a period of centuries before reaching their present form. The parts that are common to all bows are illustrated in Figure 1-5. For the bow as for the instruments, it is important to memorize the names of the various parts.



Violin Viola
Figure 1-1





String Bass

Cello

Figure 1-3

Comparison of bows. Figure 1-6 illustrates the five bows commonly used with the instruments of the string family. Except for weight and the slightly thicker stick and frog, there is very little difference between the viola and violin bows. Viola bows are a bit longer than violin bows, but only by about $\frac{3}{16}$ of an inch. The stick and frog of the cello bows are proportionately thicker than violin and viola bows. However, the stick of the cello bow is shorter and has the characteristic "swan-shaped" head. The French bass bow is only $\frac{1}{16}$ of an inch shorter than the cello bow, but the diameter of the stick, size of the frog, and weight are almost twice that of the cello bow. The German or But-

Figure 1-2. The parts common to all string instruments. The materials used are (1) Hard maple; (2) Ebony, rosewood, or boxwood; (3) Ebony; (4) Curly maple; (5) Spruce; (6) Spruce or willow; (7) Curly maple (sometimes pear or sycamore); (8) Layers of one strip of white poplar between two layers of black-dyed pearwood. From Carleen Maley Hutchins, "The Physics of Violins." Copyright © 1962 by Scientific American, Inc. All rights reserved.

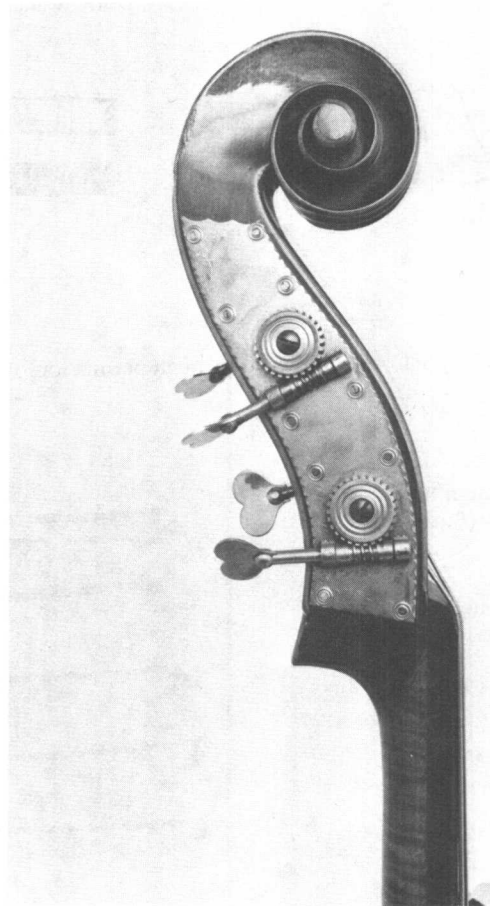


Figure 1-4. Mechanical tuning mechanism on the string bass.

ler bow is distinctive in the width of the frog and the length of the bow screw button.

Bow hair. Bows are strung with about 120 to 150 strands of horsehair. The best quality bow hair comes from Siberian or Northwest Canadian prairie horses. The quality of bow hair is judged by its ability to grip the string while producing a smooth, unbroken sound. How it wears, or the time between rehairings, is another factor to consider when measuring quality. Horsehair is very costly, and the search for a suitable substitute has not been very successful. Some synthetic hair is currently available, but the quality is adequate for student bows only.

Bow hair surface. In some current references to bow hair, there still exists the *false* notion that the surface is covered with little teeth, somewhat akin to a saw blade. The photographs in Figure 1-7, however, reveal a surface that bears little resemblance to the saw-tooth conception. These photographs were taken through a scanning electron microscope and provide the evidence and detail not possible by other means.

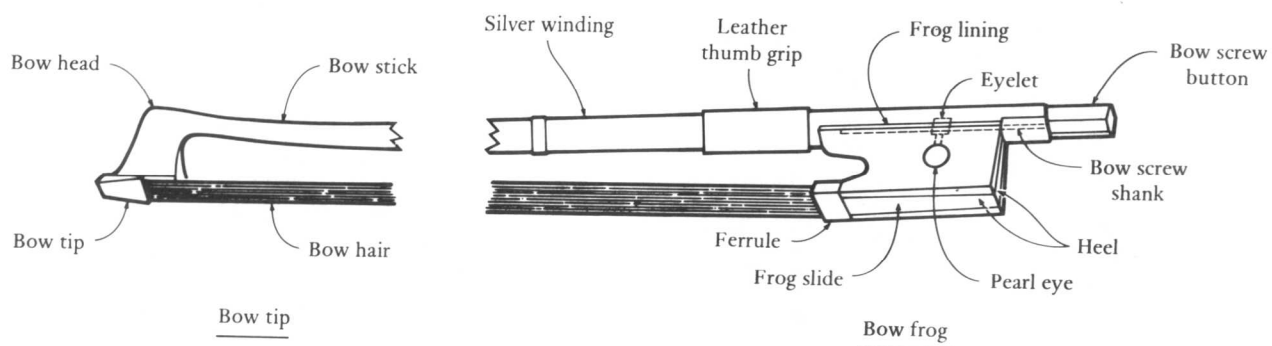


Figure 1-5. Copyright material used through permission of Niel A. Kjos Music Company, Park Ridge, Illinois.

German Bass Bow
(Butler)

French Bass Bow

Cello Bow

Viola Bow

Violin Bow

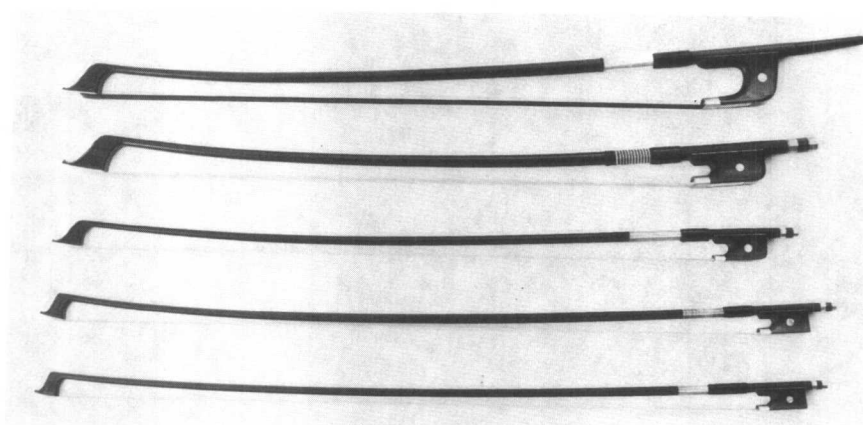


Figure 1-6

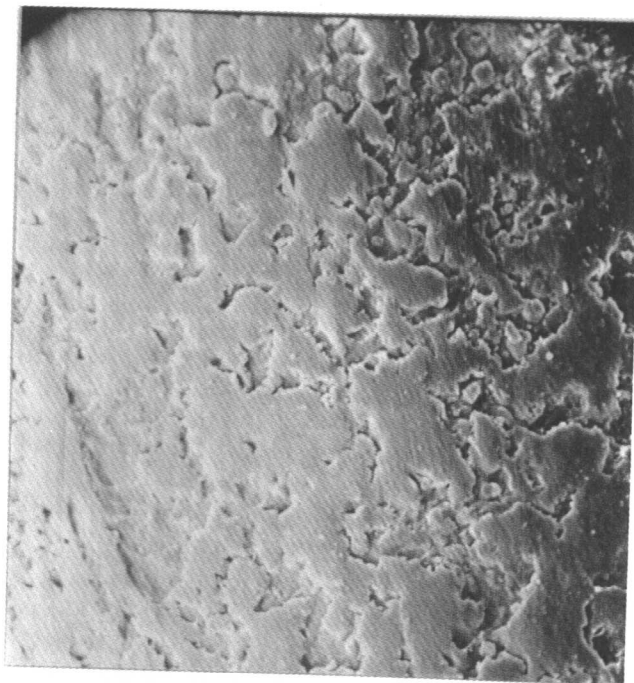
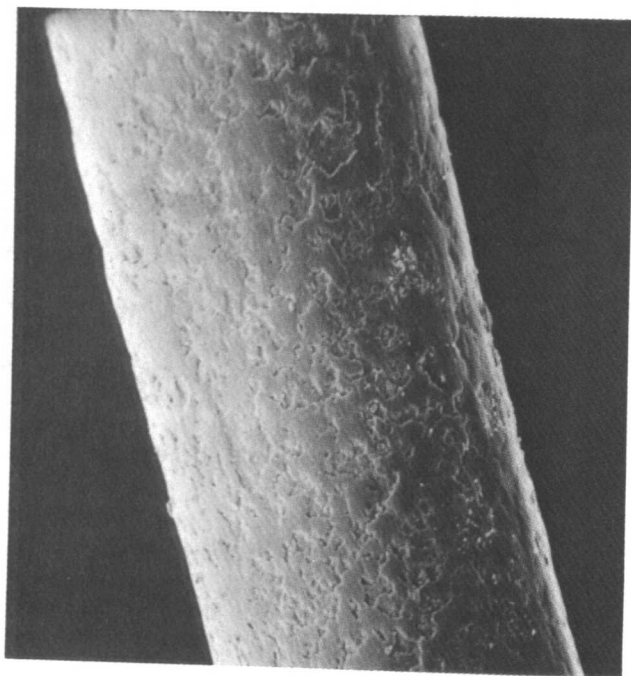


Figure 1-7. Bow hair surface, magnified 250 times (left) and 650 times (right).
Photographs courtesy of G. T. Chubb, Argonne National Laboratory.

Rosin. A fresh, clean bow hair will not produce a very audible sound until it has been rosined. When rosin is applied, its brittle and sticky particles cling to the surface of the hair and cause the strings to vibrate through abrasive action.*

HOLDING THE INSTRUMENTS AND BOWS

Steps to Holding the Instruments

The proper playing position is the first and perhaps most important aspect of beginning string teaching. It is the base upon which all subsequent techniques must rest. Since students will have to learn two distinctly different tasks (holding the instrument and holding the bow), each task should be introduced separately.

There is always the question of whether to begin a class with the violins and violas in the *standing* or *sitting* position.** Both approaches can be successful, and each offers several distinct advantages. In the sitting position: (1) the students are more comfortable, more relaxed; (2) they receive essential preparation for ensemble playing; (3) visibility is increased—the line of sight between the instructor and the student is not blocked by other students; (4) the chance of accidental damage to the instrument or bow is minimized. For the standing position (violins and violas): (1) at the introductory level, the mechanics of movement are more easily integrated because of the motion of the body as a whole; (2) muscular tension tends to be lessened; (3) the students gain an earlier awareness of the interrelationship between arms, body, and balance.

At this point consideration must be given to the type of chair used, because the wrong kind can interfere with the establishment of the correct playing position. Generally, the design of the chair should be the nonsloping (flat seat) type with a straight back. The standard sized chair, while not ideal, can be adequate for the small violinist or violist, but is totally unsatisfactory for the small cellist. Since the knees of the cellist play a direct role in the support and positioning of the instrument, the height of the chair is critical and must be sized to the student. The height of the chair should permit the cellist's feet to rest flat on the floor forming a 90 degree angle between the upper and lower leg. A variety of different chair sizes should be kept on hand for this reason.

Some Preliminary Procedures

Instrument identification. Prior to issue, all instruments, cases, and covers should be numbered and labeled with complete student and content identification. For cello and

string basses, a baggage-type tag may be tied to the strap handles of the canvas covers.

Correct size instruments. In the school string program, selecting the correct size instrument and bow for *each* student can spell the difference between success and failure. Suggestions for measuring the students and for selecting the correct size and number of different instruments to keep on hand are contained in Chapter 7.

Complete outfit. Whether school, rental, or student-owned instruments, each must be a complete outfit of bow, case, rosin, shoulder pads for violins and violas, and end-pin holders for cellos and string basses. All bow clamps, case locks, snaps and zippers, straps and handles must be secure and checked frequently. In addition, the equipment must be in perfect adjustment.

Shoulder pads. To achieve the proper position and encourage a relaxed and natural posture, the use of a shoulder pad is strongly recommended for the violins and violas. Because of the individual physical difference between students, the thickness of the pad will vary. The shoulder pad is a proper fit when the student can support the instrument without raising the left shoulder or pressing the jaw excessively into the chin rest. The composition of the pad may be any soft material—foam or sponge rubber, a cloth-filled bag, etc. The pad should be rectangular in shape and cover an area about twice the size of the chin rest. Fasten the shoulder pad on the back side of the instrument—opposite the chin rest—with a rubber band stretched from the lower corner block to the end button (see Figure 1-8).

Working plan. As you begin to teach how to hold the instruments and bows, you must establish an efficient working pattern. The following points should be included in whatever plan proves to be the most efficient:

1. Open the cases and handle the instruments away from obstructions. One possibility is to place the cases and instruments a few feet in front of the students. This will allow them to observe how the instrument or bow should be handled when removed from the case.
2. Work with one student at a time, while encouraging the rest of the class to act as observers.
3. Demonstrate and explain all aspects of holding and playing the instruments *before* directly instructing individual students.
4. Be systematic. Teach one instrument at a time and create a routine that is a predictable pattern so students know clearly what to expect.
5. For added reinforcement, repeat all demonstrations several times.
6. Verify the quality of your instruction by asking your students to teach you.
7. Keep the physical aspects of playing the instruments separate from music making. Introduce all

*How and when to apply rosin are discussed on page 23.

**The sitting position for the string bass player should not be introduced until the student has had considerable playing experience in the standing position, and only if a stool of correct size (30 inches) or an adjustable bass chair is available.

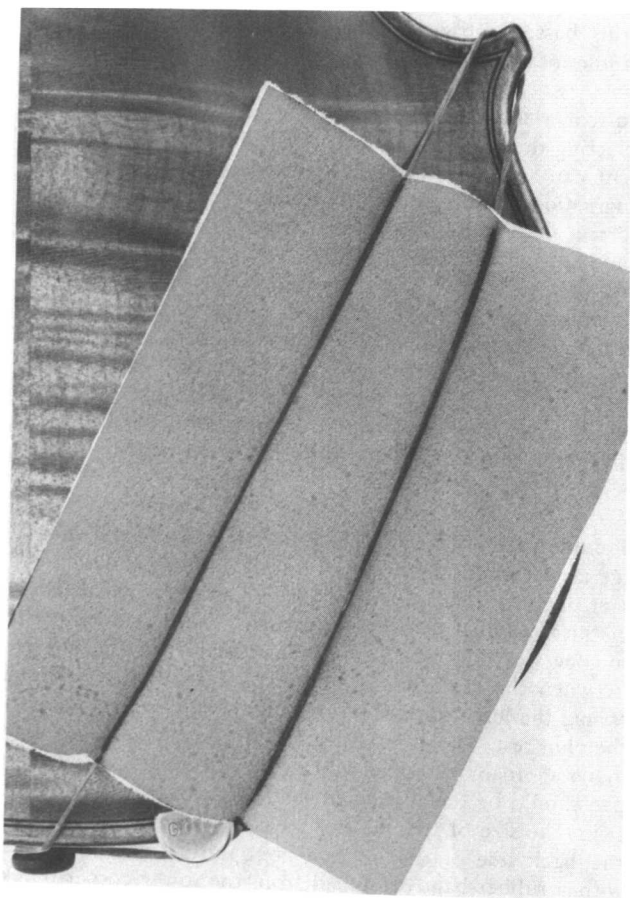


Figure 1-8. Violin/viola shoulder pad.



Figure 1-9. Violin or viola: playing position.

new techniques through the *rote approach*. This will permit students to focus their concentration on the technique—not the interpretation of a music symbol.

8. In early instruction, physically assist students in achieving the techniques being studied: set their hands on the instruments, help them draw the bow, etc.

9. Once students have achieved a satisfactory position of some physical “set,” ask them to memorize that sensation.

Common errors. As your class progresses, the responsibility for holding and playing the instrument naturally shifts to the student. As this happens, there will be occasions when one or more of the conditions to achieve—cited in the following sections—will slip out of “set.” To a very large extent, the art of teaching the strings requires cataloguing *visual reference points*. Any deviation from the ideal “picture” of correct posture and application of techniques is readily observable once these visual reference points are memorized. They are both the indicator and the solution to the problem. The figures and commentary that follow will help to illustrate and direct your attention to these refer-

ence points; also, a listing of common errors of holding and playing the instruments—and holding and playing with the bow—is given at the end of the sections related to each of the instruments. Review these and the figures periodically; they are the fundamentals for successfully diagnosing and correcting errors.

Sitting Position

Violin and viola. Show that the violinist and violist will sit somewhat forward on the chair, back erect, with both feet flat on the floor. The right foot is usually slightly behind the left foot. The feet, however, should not be “locked” over specific spots. Students should feel free to adjust this position slightly to prevent tension. Figure 1-9 shows an acceptable sitting position, with the instrument in the playing position.

Cello. The cellist sits well-forward on the chair; the back is straight, with the body leaning slightly forward. Both feet are flat on the floor, and are generally located opposite each other. Because the positioning of the feet will affect the position of the cello, no exact placement can or should