Q. I recently acquired a Conn alto and tenor saxophone (#149255 and #209326) from the late 1920s, and I am considering restoring them to serve as professional instruments. I know from your column that saxophones from this era played jazz and popular music, but as my musical interests include concert and orchestral music, I would like to know if these older horns can play as well as modern saxes in such demanding situations.

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A. As long as the saxophones have not suffered major structural damage or abuse, (that is, if they can be restored to their original condition) then their restoration should produce instruments quite capable of playing and sounding in the most demanding concert ("classical") situations. The success of such a restoration is dependent on the condition of the saxophones as received. The structural integrity of the instrument needs to be intact in order for the original regulation and specifications to be approached. Look to see if major dents were suffered and how they were repaired. Carefully look at the tone hole sockets (rolled on Conns) to be sure they are smooth, even, and have not been previously damaged. This is important not only for the seal of the instrument, but for the quality and consistency of the regulation, which will affect such critical aspects as response and intonation throughout the life of the horn.

If your saxophones have been lacquered (the originals, from the 1920s were either polished brass or plated in silver, gold or nickel), then they underwent a substantial alteration. Only if the relacquering was of the highest quality will your instruments be capable of regaining their original specifications. Part of the lacquering process involves buffing of the body and keys, a particularly delicate and critical operation. When the job is done well, little metal is lost, and the horn is fully functional. Too often, though, the buffing wheel is inconsistently applied, resulting in uneven or excessive wear. It is actually removing metal from the body of the saxophone. Check to see if the engraving and serial numbers can be easily read, or if they look indistinct and washed out. Examine the rods for uniform roundness and thickness Look again at the tone holes to see if they were unevenly buffed.

Examine the rods critically to see if they are bent, overly rusted, or have excessive play. Normally, swedging will remove the play (though occasionally the rods have worn down too far to be rescued), and rust can be cleaned off. Straightening bent rods is a tricky, not always
successful operation. Straight rods are essential for a consistent professional “feel” of the instrument, especially in demanding, subtle solo passages where key control affects smoothness, connection, tonal consistency and intonation.

A common problem of modern restoration of vintage saxophones is the regulation of key height position. In an effort to increase the loudness of the instrument, the keys are often positioned much higher off the tone holes than the original design intended. While this may result in a louder saxophone, the distortions of pitch and tone, as well as the mechanical "feel" of the instrument are often so unwieldy and uncomfortable as to make the instrument seem unusable. A contributing factor may be the size and thickness of the replacement pads. While no responsible repair person would recommend original white kit pads, too often I have seen overly thick replacement pads crammed into the key, resulting in an unnatural fit and forcing adjustment compromises in key height, springing, and the motion or ‘throw’ of the key to the tone hole. Many saxophones have been unfairly criticized as professionally unplayable only because the key height positioning violated the design criterion of the instrument.

No discussion of saxophone restoration would be complete without discussing the most critical component of sound production: the mouthpiece. Saxophones up through the early 1930s were designed to function best with the excavated chamber mouthpieces of that era, all of which had relatively similar design characteristics. These shorter and squatter mouthpieces were designed to complement the bore and taper of these instruments resulting in more consistent intonation, response and tonal continuity. True, the added resistance of these mouthpieces results in a more lyric, darker tone quality without the dynamic range (loudness) of more modern mouthpieces and instruments. For some this is an advantage, allowing for more projection of sound than disturbance of the air. (There are a few mouthpiece makers still active whose design complements saxophones from this era. I use the Caravan, which offers a greater dynamic range than the original mouthpieces. It also functions well with modern instruments.) As the popular need for louder and brighter sounds grew, new instruments and mouthpieces were designed. Although the conical bore of the saxophone was retained, its taper and proportions were altered. New mouthpieces sprang up by the dozens offering designs and shapes affecting chamber size, length, tip opening, baffle angles, etc. all of which changed the sound of the saxophone considerably.

This is not to say that a modern mouthpiece will not perform satisfactorily on an earlier instrument, for many excellent players use such a set up quite successfully. There is an extra degree of compromise that sometimes can be more than adequately compensated with subtle embouchure, airspeed and glottal/larynx (throat) repositioning. Depending on the materials (including the flexibility of the player) these compensations range from hardly noticeable to making the saxophone sound unplayable.

Having discussed some of the considerations for proper restoration of your saxophones, the question arises as to just how well older horns play. My performing experiences with modern and vintage saxophones have convinced me of the viability of both. In my
professional playing (ranging from sopranino to contrabass) I use an eclectic mix of saxophones, combining modern horns (mostly Selmers) with earlier instruments including Buescher, Conn and Martin. My soprano saxophones are a good example in that I use both a Selmer straight and a Buescher curved, depending on the situation. For commercial work, jazz and show music, the Selmer (with a Selmer E mouthpiece) works very well, providing excellent pitch, response, and a brighter, more powerful tone, as these situations require. It is a superb instrument and one of the best playing in my collection. For orchestral, chamber and recital playing though, my Buescher curved (with a Caravan mouthpiece) is the soprano of choice, for in sound and response it lends a tonal consistency and refinement more closely related to the orchestral woodwinds. With the curved soprano I have several times performed the exposed soprano solo in The Age of Gold Suite by Shostakovich, in addition to the solos in Bolero and the Piano Concerto of Copland. I play most chamber and recital pieces on the Buescher with few problems of intonation or response. The particular idiosyncrasies (intonation, response, tone, etc.) of this instrument are no worse than any other saxophone, modern or ancient, although I have found that they differ from those on my Selmer soprano.

Were older saxophones better instruments than musical situations of the time demanded? Although we are most familiar with the popular side of music making in the 1920s, there was considerable activity in classical and orchestral circles that involved the saxophone. Considering the relative newness of the instrument it was taken quite seriously and given unusually exposed roles in chamber and orchestral works. Some examples of chamber works from the 1920s include Facade by William Walton (1923), Choros #7 (1924) and Quartet (1923) (flute, alto saxophone, harp, celeste with women's voices) of Heitor Villa-Lobos, Trio Op. 47 (1929) (viola, tenor sax, piano) of Hindemith, Caramel Mou (1921) of Milhaud, Trio (1926) (violin, cello, alto saxophone) of Ernst Roters and the Quartet Op. 22 (1930) (violin, clarinet, tenor saxophone, piano) of Anton Webern. Not to be forgotten is perhaps the most famous large chamber work featuring the saxophone - La Creation du Monde (1923) of Darius Milhaud.

Orchestral works using the saxophone were no less plentiful in this decade, with a startling array of pieces that are now standard repertoire. It is interesting to note, as in the above listing, the international representation of composers who found the saxophone voice particularly suited to their tonal interests and orchestrations. The following compilation is only a selected sampling of some of the better known works:

<table>
<thead>
<tr>
<th>Composer</th>
<th>Work</th>
<th>Year</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alban Berg</td>
<td>Der Wein</td>
<td>c. 1920</td>
<td>German</td>
</tr>
<tr>
<td>Vincent D’Indy</td>
<td>Poem</td>
<td>c 1922</td>
<td>French</td>
</tr>
<tr>
<td>Percy Grainger</td>
<td>Hill Song #1</td>
<td>c. 1922</td>
<td>English</td>
</tr>
<tr>
<td>Maurice Ravel</td>
<td>Pictures</td>
<td>c. 1923</td>
<td>French</td>
</tr>
<tr>
<td></td>
<td>Bolero</td>
<td>c. 1929</td>
<td></td>
</tr>
<tr>
<td>Bela Bartok</td>
<td>The Wooden Prince</td>
<td>c. 1924</td>
<td>Hungarian</td>
</tr>
<tr>
<td>George Gershwin</td>
<td>Rhapsody in Blue</td>
<td>c. 1924</td>
<td>American</td>
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<tr>
<td></td>
<td>American in Paris</td>
<td>c. 1928</td>
<td></td>
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<tr>
<td>Giacomo Puccini</td>
<td>Turandot</td>
<td>c. 1926</td>
<td>Italian</td>
</tr>
<tr>
<td>John Alden Carpenter</td>
<td>Skyscrapers</td>
<td>c. 1926</td>
<td>American</td>
</tr>
</tbody>
</table>

Orchestral Saxophone Music 3
Concurrent with popular, jazz and vaudevillian music, concert music - solo recitals, chamber music programs and orchestra concerts - was very much a part of musical life. Orchestral and operatic works using the saxophone were frequently programmed, (Examples 1 & 2) and the saxophone was required to play up to these more demanding instrumental standards required of such conductors as Serge Koussevitzky, Arturo Toscanini (Examples 1 & 2) and Nikolai Sokoloff (Example 3). To those who only knew the saxophone as a dance band instrument or musical toy for the amateur, hearing it well played in an orchestral context must have been somewhat of a revelation. Some critics were enthusiastic about the role of the instrument and seemed to understand its tonal nature. In a generally negative review of a Cleveland Orchestra Concert in New York City in 1929, (Example #3) Oscar Thompson wrote

This listener found no magic, either black or white, in Jean Rivier's "first time" Overture, though it did possess the cardinal merit of utilizing a saxophone. (Werner Janssen’s work must have been at least three times as good... for it had three saxophonists . . )

Another reviewer of the same concert wrote in his description of the Theremin,

The inventor, the young Mr. Theremin, who, just like Mr. Glazounoff, comes from Russia, stood, before his instrument, which was a sort of a box on a tripod, with antennae. He moved his hands and fingers in mystic passes in the air, and a tone like a pure and magnified saxophone soared through the atmosphere and through the very loudest fortissimo . . .

In some places, though, introduction of the saxophone into concert music caused quite a stir, as revealed by the headline from a 1928 newspaper: GRAND OPERA GIVEN WITH SAXOPHONE’S AID (Example #4 contains the entire article.)

The use of the saxophone in symphony orchestras did not escape the attention of the instrument manufacturers. Ever eager to convince the public that theirs was the best saxophone, both Buescher and Conn published testimonials specifically targeted to the symphony crowd. The following (excerpted) article from the March 1928 Musical Merchandise extolled the virtues of Buescher saxophones:
BUESCHER SAX. PICKED BY BOSTON ORCHESTRA

Whether you speak to musicians in America, France, Germany or elsewhere where the intelligencia of the world congregate, as soon as the thought turns to music and orchestra, you will hear it frequently stated as an undisputed fact that Boston possesses the world's leading symphony orchestra. . . . In addition to the well-established classics... the Boston Symphony Orchestra has always stood in the front ranks of advocating the music of the modern genius and many first performances of new works have taken place in Boston Symphony Hall.

Mr. Koussevitsky has recently given much attention to American symphonic music, and the names of Charles Martin Loeffler, G. Chadwick, Foote, Skilton, Cadman, and others have frequently and prominently figured on the Boston programs. Only this year John Alden Carpenter, that great Chicagoan, figured on the programs with two of his works, "Adventures in a Perambulator," and his "Skyscrapers." It was at the occasion of the performance of this gigantic musical tone poem of American power and joy that the score called for the employment of no less than nine saxophones in the hands of three players. Mr. Abdon Laus, first bassoon and saxophone soloist of the Boston Symphony Orchestra, has for may years played Buescher True-Tone saxophones, and it was, therefore only logical that for the additional requirements of the Boston Symphony Orchestra Buescher True-Tone saxophones should be used- The Boston Symphony Orchestra saxophone section consists of Mr. R Tapley, Abdon Laus, and G. Dufresne.

Skyscrapers is an inventive, colorful score that was performed by the Manhattan School of Music this season and has recently been recorded by the London Symphony. The original version actually calls for nine saxophones, the distribution being as follows:

Player 1:  
  Eb sopranino  
  C soprano  
  Bb soprano  
  Eb Alto

Player 2  
  Eb Alto  
  Bb Tenor

Player 3  
  Eb Alto  
  Bb Tenor  
  Eb Baritone

The Conn Company had their own set of symphony saxophonists. They were occasionally featured in Conn's magazine Musical Truth either in an artist's issue, or in a special orchestra supplement. (Example 5) In some instances, the same players are listed for both companies, no doubt owing to a corporate defection or a better offer.

Orchestral use of the saxophone was an important and vital part of concert (classical) music making in the 1920s (the era that spawned the design and manufacture of most of the vintage saxophones in use). Additional efforts, though, were undertaken by individuals who recognized the saxophone as an ideal solo and recital instrument. Rudy Wiedoeft, Jascha Guerwich, H. Benne Henton, and others attempted to elevate the saxophone above the novelty status with which it had become inextricably linked. Their efforts, including adventurous recordings and innovative, precedent setting recitals, helped to cultivate a more dignified image of the saxophone in the 1920s. More on that in the next column. EXCERPTS AND CAPTIONS TO FOLLOW