



The Manufacturing History Of C.G. Conn

Lefebre, Wonder, New Wonder, Pan American American First, Victor New Wonder Connqueror, Connstellation

Steve "Saxgourmet" Goodson

For the next couple of issues, I would like to divert the discussion of saxophone design to a review of the manufacturing history of a few prominent American makers. Tracing their evolution and contributions gives us a good perspective on how saxophones evolved, and I believe it is well worth noting some of their experiences and giving due consideration to revising and utilizing some of their ideas.

We will begin our trip down saxophone Memory Lane with a look at two of the giants of the past, Conn and King, both of whom are sadly no longer making saxophones.

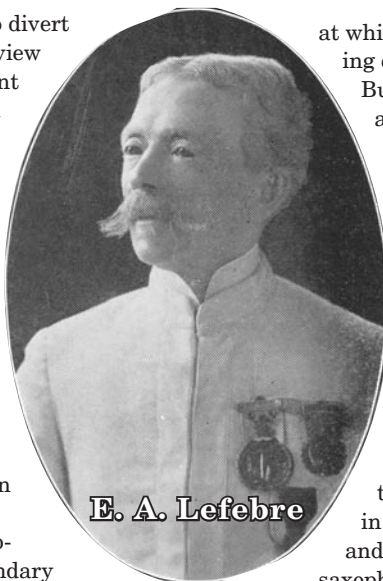
C.G. CONN

For over one hundred years, the name Conn has meant the very finest in American-made saxophones. In fact, Conn started making saxophones in the United States in 1875. The legendary models of the earlier part of the twentieth century are among the most prized and sought after among collectors and performers alike. As a tribute to the quality of construction and design, vintage Conn saxophones are often seen today in the hands of top professionals as the "instrument of choice", and many of the innovations first pioneered by the Conn company are found on instruments produced today by manufacturers around the world.

FIRST SAXOPHONE BUILT IN THE USA

The very first saxophone built in the United States was built at the Conn plant in Elkhart, Indiana, in 1889 for E. A. Lefebre, a saxophone virtuoso who had risen to international fame as a soloist with the famous Sousa and Gilmore bands of that era. It was the Bandmaster Gilmore, of New York, who invited Mr. Lefebre to come to America.

Mr. Lefebre was also a personal friend of none other than Adolphe Sax, the inventor of the saxophone, and had previously used instruments supplied to him by Sax himself. The original Conn saxophone was actually constructed by Ferdinand "Gus" Buescher, who was foreman at the Conn factory and who was employed by Conn from 1875 until 1895,



E. A. Lefebre

at which time he established an instrument manufacturing company bearing his name. The instrument that Buescher built for Lefebre was essentially a copy of an Adolphe Sax horn, and Lefebre was eventually persuaded to join the Conn company, where he was employed in the saxophone department from 1890 until 1901. In 1901 E.A. Lefebre again took up concert work, continuing his playing career until 1911, when he died at age 77.

WORLD'S COLUMBIA EXHIBITION (1893)

Conn exhibited alto and tenor models at the 1893 World's Columbia Exhibition under the model name "Wonder", and in 1894 advertised a line of "Improved System" saxophones which included straight soprano, alto, tenor, and baritone models. These instruments were available in silver plate with gold plated keys; nickel plate; and polished brass. At the time the "Wonder" line of saxophones were being manufactured at C.G. Conn factory in Elkhart, Indiana, over 500 employees were at work in various departments in the factory, with each department under the control of "an expert saxophone builder." Eventually the Conn factory employed upwards of 1,000 workers (and 180,000 square feet of floor space) building band and orchestra instruments, and was known as "the largest institution of its kind on the face of the globe."

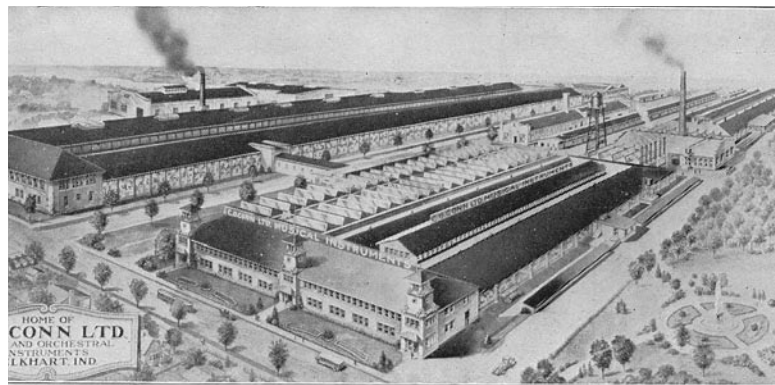
C.G. CONN ELECTED TO CONGRESS (1892)

C. G. Conn, the founder and owner of the company, was elected to the United States Congress in 1892, and introduced a bill which required that every United States Army regiment have its own band, and specified the instrumentation for the musical unit. As a result, military orders for Conn instruments boomed, and in May, 1900, 150 Conn "Wonder" saxophones were delivered to the Army, and were received at the Schuylkill Arsenal by Louis Seel.

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TRADE-MARKING NEW SAXOPHONE NAMES

During this era, Conn began trade-marking names that designated various models. These included Wonder (February 1, 1891); New Wonder (May 1, 1917); Pan American (January 29,



HOME OF NEW WONDER SAXOPHONES



1918); American First (February 5, 1918); C. G. Conn (April 2, 1918); and Victor New Wonder (October 15, 1918).

In 1911, Conn advertised a family of saxophones that included a curved soprano (which replaced the previous straight model); a C Melody; and a bass, in addition to the standard alto, tenor, and baritone models. The ad mentioned an automatic octave key (actually introduced some time earlier) and a forked E flat mechanism. Only the alto and tenor models were keyed to high F, the rest of the line was limited to high E flat. A 1915 advertisement references an "improved" octave mechanism; a front F key; a G sharp trill key; a lengthened G sharp key, and a revised arrangement of the left hand pinky table. The 1915 horns were referred to as "New Invention" models, and were awarded the Medal of Honor; a gold medal; a silver medal; and a bronze medal at the Panama-Pacific Exhibition held in San Francisco.

In an effort to increase international sales during this period, Conn offered saxophones in both Low Pitch (A=440), and in High Pitch (A=457).

CONN CATALOGS (1916 and 1918)

By 1916, Conn was advertising that "the saxophone department has been quadrupled in size", and the 1918 catalog references the introduction of a straight soprano in E flat and a straight soprano in C. This catalog also makes mention of the Conn Microtuner and the Conn Resopad, both hailed as significant advances. These horns are referred to by Conn as "New Wonder" models, Conn saxophones of this era were seen with both soldered and drawn tone holes. The drawn tone holes are referenced by a patent engraved on the body tube (1,119,954 December 8, 1914) which was actually held by William S. Haynes, the flutemaker, and licensed to Conn. Rolled tone holes were introduced around 1920, although straight tone holes were often found for a few more years.

RE-INTRODUCTION OF Bb SOPRANO (1922)

The 1922 catalog saw the re-introduction of the straight B flat soprano and the Conn Vacuum pad, which was designed to be installed without adhesives. The straight neck C Melody also made its debut in this year. During this period, Conn saxophones were often seen with spectacular engravings, and considerable experimentation was carried out in manufacturing techniques and design improvements. Conn was unique among American manufacturers in that a full time laboratory with a staff of six was maintained to pursue design improvements.



Conn "Wonder" Alto Saxophone

THE CONN DESIGN LABORATORY

The Conn design laboratory employed several designers, principally Allen Loomis; Hugh Loney; Paul Hardy; Russell Kerr; Edward Gulick; and Leland Greenleaf. The legendary Santy Runyon also consulted with Conn on design matters. Loomis was known for his innovative, often bizzare, designs, many of which were never considered practical enough to enter production. Gulick might best be remembered for his design of the locking pivot screw, a device which has frustrated repairmen for years.

LATE 1920'S CONN SAXOPHONES

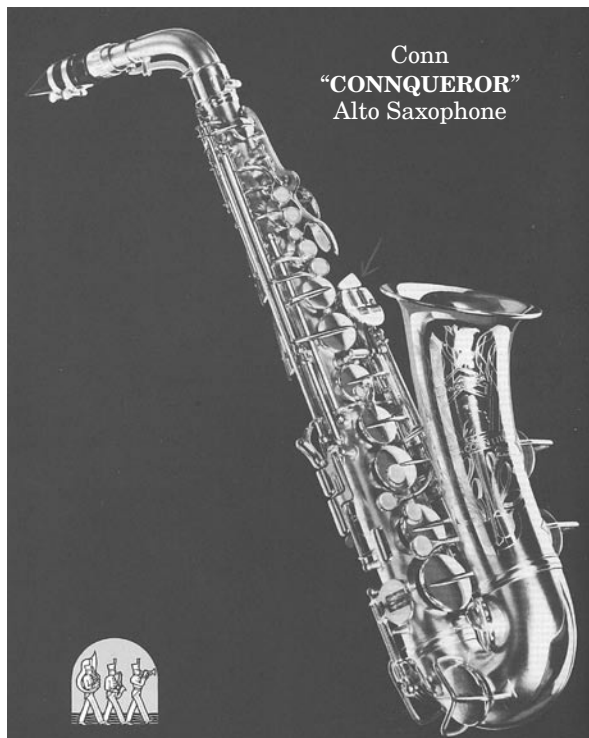
Conn saxophones in the late 1920's were essentially an evolution of the earlier models. There were, of course, improvements in keywork (the cross-hatched G sharp key of 1925, for example), and a redesigned straight soprano in 1928. The Conn instruments were considered the standard of excellence of the period, and a total redesign was not needed. Custom engraving and various finishes were offered, and these are among the most beautiful saxophones ever constructed.

INTRODUCING THE F MEZZO SOPRANO (1928)

A surprising lapse of judgment was exhibited by Conn in 1928, with the introduction of the F Mezzo Soprano. Although the instrument had several unique features (left mounted bell keys, for example), there was simply no demand for a saxophone keyed in F, and the vast majority of these instruments went unsold. Many, in fact, were later used in the Conn Repair School to train technicians.

THE CONN-O-SAX IN F

The F Mezzo was quickly followed by the Conn-O-Sax, also keyed in F, but with an extended range from written low A to high G. This strange instrument was quickly rejected in the marketplace, and both it and the F Mezzo were no longer offered by the factory after 1930.



Conn
"CONQUEROR"
Alto Saxophone

A NEW ALTO SAXOPHONE (1931)

In 1931, a new alto was introduced which set the saxophone world on its ear! The totally new design carried over some of the great features of the past such as rolled tone holes; Resopads; Microtuners; and adjustable pivot screws; and added an entirely new mechanism which was far superior to anything seen before. The neck gained a tenon skirt to assist in sealing and aid in the elimination of the "buzzy A"; the octave key was moved to the underside of the neck to protect it from damage; the low C sharp, B, and B flat keys now

opened the G sharp pad; and the high E key gained a curve. A swivel thumbrest was added and most keys were repositioned to give the most direct mechanical action. Most, but not all, of these features soon found their way to the tenor. The line continued to evolve, and the baritone and bass models were soon offered keyed to high F.

THE CONN CONQUEROR (1938)

Conn raised the bar again in 1938 with the introduction of the Conqueror series alto and tenor (the alto selling for \$150 and the tenor selling for \$180). These instruments used the wonderfully complex but efficient Permadjust action, developed by Hugh Loney. This system solved the age old problem of cork compression and key height adjustment. The left hand pinky table was moved to a more comfortable position, and the mechanism was much improved. Key touches were inlaid with silver, and special engraving was added. These are perhaps the greatest of the Conn saxophones.

THE SANTY RUNYON CONNSTELLATION ALTO

Following World War II, Conn again established itself as the leader in innovation with the Santy Runyon designed Connstellation alto. This instrument used three octave pips to even intonation and voicing; a unique mechanism unsurpassed to this day for lightness and precision; ergonomic placement of the keywork; and an ill conceived plastic keyguard. While not a success in the marketplace, the Connstellation is still highly regarded by saxophone designers and collectors.

Conn put greater emphasis on student line instruments to take advantage of the post World War II baby boom market, and paid less attention to the professional market which was increasingly dominated by other makers from outside the United States. The saxophones lost their rolled tone holes in 1948; and their Microtuners in 1954. The professional models gained nickel plated keywork in 1955, along with clear lacquer. The tenor neck was changed significantly in the late 1950's to an underslung design, but by then it was too late. In 1960, Conn acquired the Best Manufacturing Company of Nogales, Arizona, and moved most saxophone production there, although the "artist" models continued to be produced in Elkhart. The company has undergone several changes in ownership, and discontinued professional models in 1970. The Conn company was later merged with Selmer USA, forming Conn-Selmer, and has discontinued saxophone production.

In my next article I'll discuss the H.N. White "King" saxophone. §

CONN MADE

- Continental
- Jenkins
- Sears & Roebuck
- Selmer US
- Selmer New York
- Wurlitzer
- Pan American
- Elkhart
- Lefleur
- Perfactone
- Kalashen's Kleartone
- Bruno
- Gretsch
- Bundy
- Olympian

CONN SAXOPHONES MODEL NUMBER GUIDE

- 2-M.....C Soprano
- 4-M.....Bb Curved Soprano
- 6-M.....Alto
- 7-M.....Alto (high pitch)
- 8-M.....C Melody
- 9-M.....C Melody (high pitch)
- 10-M.....Tenor
- 11-M.....Tenor (high pitch)
- 12 -M.....Baritone
- 13-M.....Baritone (high pitch)
- 14-M.....Bass
- 18-M.....Bb Soprano (straight)
- 20-M.....Eb Soprano
- 22-M.....F Conn -O-Sax
- 24-M.....F Mezzo Soprano
- 26-M.....Alto "Conqueror"
- 28-M.....Alto "Connstellation"
- 30-M.....Tenor "Conqueror"

Serial#	Year	
9600.....	1905	304500.....1942
10800.....	1906	309250.....1943
12000.....	1907	309300.....1944
13000.....	1908	310200.....1945
15400.....	1909	314000.....1946
17800.....	1910	320000.....1947
21200.....	1911	327150.....1948
22500.....	1912	332150.....1949
25000.....	1913	337250.....1950
30000.....	1914	341850.....1951
35000.....	1916	341851.....1952
40000.....	1917	354742.....1953
50000.....	1919	359251.....1954
58000.....	1920	500001.....1955
64000.....	1921	571750.....1956
83000.....	1922	652002.....1957
101775.....	1923	718626.....1958
124600.....	1924	779657.....1959
145400.....	1925	834200.....1960
167900.....	1926	898556.....1961
193450.....	1927	949465.....1962
209250.....	1928	C00501.....1963
224600.....	1929	C73854.....1964
237800.....	1930	E54106.....1965
244700.....	1931	H31247.....1966
249230.....	1932	K35274.....1967
256501.....	1933	L20454.....1968
260000.....	1934	
263500.....	1935	
271000.....	1936	
278000.....	1937	
284000.....	1938	
285000.....	1939	
288300.....	1940	
295250.....	1941	

Steve Goodson has included additional information about the Conn saxophone history which can be viewed as a multi-page PDF file at www.dornpub.com/download.html. Scroll down to May/June 2011 *Saxophone Journal* for the link.

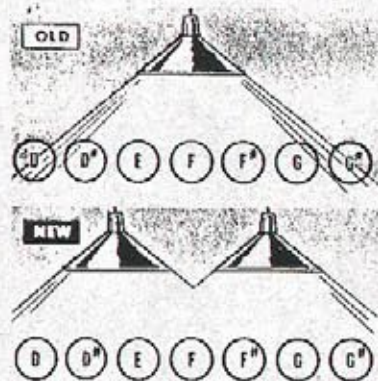
Why THIS FAMOUS TEACHER PLAYS THE CONN.

28M Constellation

SANTY RUNYON'S success as a famous teacher and authority is readily acknowledged by saxophonists not only in his home city of Chicago but from coast to coast. Santy advises his students, "A professional musician is handicapped enough even if he has the best. You can hardly afford to play an instrument which does not have good intonation, good carrying power, instant response and fine tuning. You'll find all these necessary qualities in a Constellation."



Still the Only completely New Alto Saxophone!



NEW DOUBLE OCTAVE VENTING

Compare *old* type single octave venting of tone holes (represented by coverage of light from single lamp) with that of **NEW** double venting (like coverage of two lamps). The **NEW** principle puts vents closer to tones they influence.

Result: No more stuffy middle D or thin G and G#.

NEW TONE...NEW ACTION...NEW STYLING

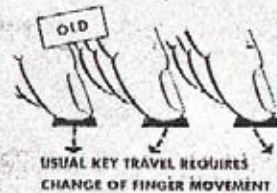
Here's built-in "Modern Tone," the result of a combination of sensational new developments, including an entirely new bore.

New, faster, smoother action results from a completely new key mechanism which achieves an efficiency and ease of operation never before realized.

New styling features, from mouthpiece to bell, make the Constellation superb in appearance... the ultimate in functional design.



Write today for folder... describes and illustrates the many other exclusive 28M features... or see your Conn dealer. No obligation. Address **CONN BAND INSTRUMENT DIVISION, C. G. Conn Ltd., Elkhart, Indiana, Department 652.**



USUAL KEY TRAVEL REQUIRES CHANGE OF FINGER MOVEMENT



CONNSTELLATION KEYS DEPRESS IN IDENTICAL, NATURAL MOVEMENT

NATURAL KEY ACTION

Unlike the old-type keys that require varied finger movements, the **NEW** Constellation key action follows finger direction — **ALL** keys depress in identical, natural movement. Here's greater comfort, faster execution!

WORLD'S LARGEST MANUFACTURER OF BAND INSTRUMENTS

CONN SAXOPHONES . . .

"Choice of the Artists"



EDNA MEYER - Leading NYC radio personality and the former lead alto with the Kaye-Kramer Trio and Bob Joyce Orchestra. Plays 24M Connstellation.



HARRY RUNTOW - Soloist with prominent Chicago orchestra and studio. Plays 24M Connstellation.



CHARLIE STAGNER - The most solo artist, Charlie Jackson Orchestra. Recorded with Ernest Innes King orchestra and. Plays 24M Connstellation.



CECIL LARRISON - Prominent Chicago-based orchestral tenor and vocal soloist. Plays 24M Connstellation.



EDNA POWELL - NYC New York radio and recording soloist. Plays 24M Connstellation.



CONN 24M

Connstellation
ALTO SAXOPHONE

NEW

IN BORE AND TONE . . .

From tip of mouthpiece to rim of bell, an entirely new bore gives Connstellation a "wooden" tone quality that is clear and brilliant, brilliant and velvety . . . a pure, rich and harmonious blend of overtones throughout the entire range.

IN DOUBLE PENTED OCTAVE REGISTER . . .

One of the most important developments in saxophone history! . . . Two octave keys mounted on single key arm, work automatically when octave key is depressed. Round, open, more even response in tenor and perfect upper register. No "stuffy" middle D or "dilly" G and G-sharp. Instantly ready superior to anything else on the market.

IN LIGHTNING KEY ACTION . . .

Completely new mechanism features "see power" in all keys through uniform diameter and travel, uniform spring under fingers and specially designed, long, light springs. New positive key stops; new pads and fat pad cups; new, long tone levers.

IN EASE OF FINGERING . . .

New, comfortable chassis for left hand thumb . . . new double table keys for little finger left hand . . . new large finger joints . . . new curved type supports for index & ring, first finger left hand . . . new right hand key mechanism for making F-sharp.

IN EFFLING AND ACTION . . .

The last word in appearance and functional design for sound, fast action and modern tone quality. The look also set over built, completely new . . . Mechanically new . . . Stylishly new.

CREATED AND PRODUCED EXCLUSIVELY BY
CONN BAND INSTRUMENT DIVISION
C. G. CONN LTD., ELMHURST, INDIANA



Send for CONN LITERATURE

See your Conn dealer, or write for folder describing and detailing all the important features and advantages of this new, all-new CONN-STAR SAXOPHONE. Address Dept. 121



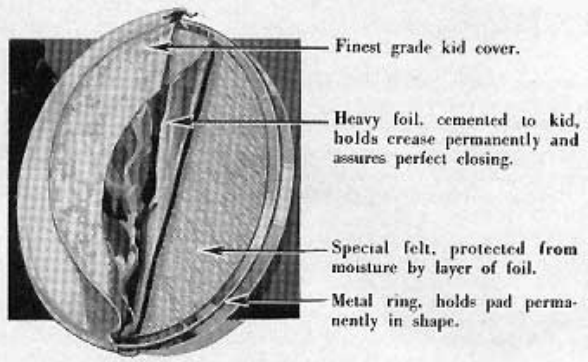
WORLD'S LARGEST MANUFACTURER OF BAND INSTRUMENTS



Conn-Foil Vacuum Pads Regular Equipment

THE most important single improvement for Saxophones since the advent of the drawn and rolled-edged sockets has just been perfected in the Conn factories, and the new *Conn-Foil Vacuum Pads* are now furnished on all models of Conn Saxophones.

The illustration to the right shows the detailed construction of these remarkable new pads. A layer of heavy foil has been introduced, cemented to the kid on one side and to the felt on the other, with a special cement which preserves its elasticity for years. The result is a pad which can be creased cold and which will not lose its crease in spite of climatic changes, moisture, or other unfavorable conditions.



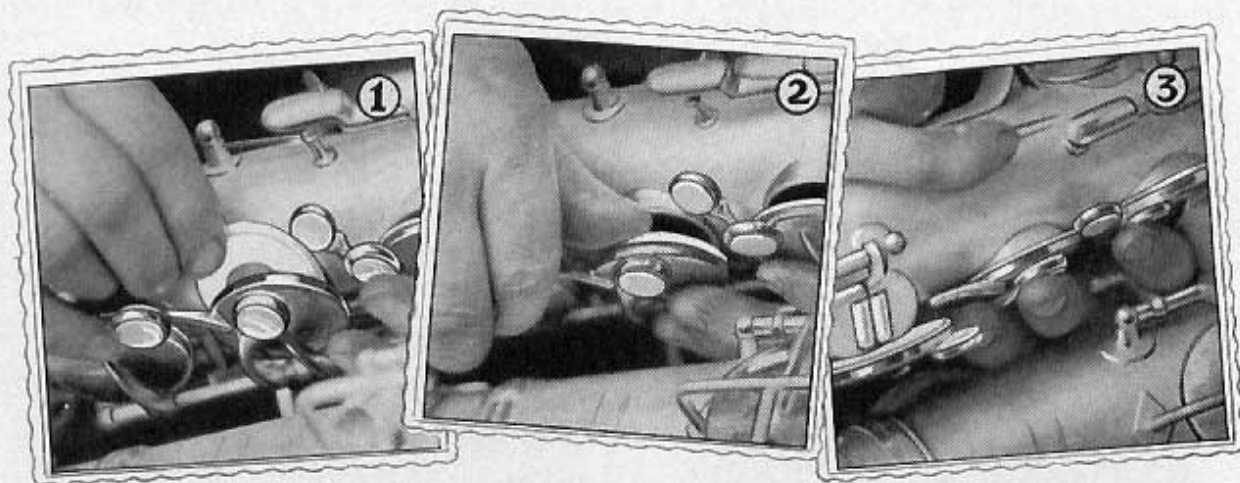
A positive, perfect, guaranteed seating and closing is assured by the new pads. Moreover, the layer of foil protects the felt from moisture, so the new pads cannot become stiff and useless. The foil acts also as a sounding board, in a sense, for each tone-hole, preventing the felt from absorbing the strength of the sound waves as they emerge, and reflecting them instead in full volume on their proper course. This feature of the new

pads has resulted in a marvelous improvement in tone; in fact several artists have enthusiastically declared the tone to be improved by fifty per cent. The new *Conn-Foil* pads, which are protected by patents pending and can be used only on Conn Saxophones, include the valuable quick-change feature which has been used on Conn pads for some time. They can be removed or replaced without

tools, without screws, cement, or clips, and without dismounting any portion of the keys or mechanism.

The lower picture on this page, showing a cross-sectional view of a pad and socket, shows quite plainly how the new pads function to assure perfect closing. Attention is also called to the drawn sockets—note that the sockets are continuous parts of the body metal, and not soldered or welded on. The importance of another exclusive Conn feature is also demonstrated in this picture. Notice how the sockets have rolled edges, offering a wide, perfectly level seat for the pad, with absolutely no possibility of cutting.

The exclusive features here described cannot be obtained except on a Conn, and every Conn Saxophone includes these features, *at no extra cost to you*. You can afford to buy the best because it costs no more than others.



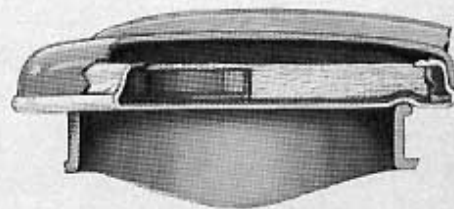
Conn-Foil Vacuum Pads on CONN Saxophones

ALL ^{CONN} Saxophones are now supplied with the new *Conn-Foil* pads, retaining the "Vacuum" or quick-attachable feature which was introduced some time ago. The three photographs above illustrate the simple process of replacing these pads, demonstrating that it is unnecessary to remove any keys, or use any tools, screws, springs or cement in making pad changes.



The new feature in ^{CONN} pads, on which patent is pending, is the layer of heavy foil between the kid and the felt. This makes it possible to "crease" the pad without heat, besides giving a positive and guaranteed seating and covering. The illustration to the left shows one of the new pads cut open for your inspection. The foil is fastened with plastic cement to both kid and felt, and the crease, which is easily put in the foil, can never come out. The presence of the foil prevents moisture from reaching the felt to cause it to harden, and when the tone hole is open, the foil hanging at an angle in front of it acts as a sounding board, reflecting the sound waves instead of permitting part of their strength to be absorbed by the soft felt.

The sectional view of pad and socket reproduced to the right will make the construction of this remarkable improvement more clear. Notice how the pad is held in place by friction between the metal ring and the metal key pad. This metal ring also holds the pad permanently in shape. Observe also the rolled edge on the socket—another exclusive Conn feature—which prevents cutting and wearing of the pad, besides offering a more positive seat.



All of these features are to be had without extra cost on any new ^{CONN} Saxophone.

The CONN-O-SAX

Will Satisfy the Big Demand for SOMETHING NEW

BILLY MARKWITH, formerly with Tom Brown, and for the past ten years rated at the top as a blackface comedian, writes us out of a musical experience of twenty-eight years, as follows:

"It's getting harder every year to make good and get a hand from the present-day audience. Old stuff will not go, people will not sit and listen to acts they have heard and seen before. The act that wishes to succeed must have something NEW, something DIFFERENT."

Take this hunch from an experienced and unusually successful showman. Not only is the Conn-O-Sax a novel instrument in appearance and in tone quality, but it is very fine musically. It is not a freak with little or no musical beauty but it is a fine musical instrument in its own right. People will not only be attracted by its novelty, but they will be struck with the new beauty of its tone and performance.

Plays LIKE SAXOPHONE
Sounds LIKE ENGLISH HORN
Looks LIKE HECKELPHONE

THE Conn-O-Sax is a cross between a sax and the old heckelphone, or baritone oboe. It looks like this now almost obsolete instrument, although made of metal instead of wood, and suggests the heckelphone in tone quality. It plays just like any saxophone, sounds a great deal like the saxophone and is played with an ordinary saxophone mouthpiece.

WIDE RANGE — Unusually wide range is given to the Conn-O-Sax through the addition of a low A key, played with the thumb of the right hand, and a high F and high G key, played with the first finger of the right hand. Its range lacks only one whole step of being three complete octaves.

SAXOPHONE FINGERING — Anyone who plays a saxophone can play the Conn-O-Sax. The fingering is exactly the same as on any saxophone, with the exception of the low A and high F and G keys, mentioned above. The mouthpiece is the same as that used on the F Mezzo-Soprano.

MUSIC AVAILABLE Being built in the key of F, this instrument plays from the same music written for the F Mezzo-Soprano, publishers of which are listed on page 22. Besides, all English horn parts are suitable, both because this instrument has a tone quality similar to the English horn and because it is built in F, the same as the English horn.

ENGLISH HORN SUBSTITUTE — With this new instrument, bands and orchestras without English horn, can put a saxophone player on the Conn-O-Sax and have him play English horn parts with good effect. It can also be used to play French horn parts.

ORDER FOR SIX DAYS TRIAL

Conn-O-Sax, 22M—Burnished Gold, \$260; Satin Gold, \$220; Gold and Silver, \$185; Silver, Gold inside Bell, \$145; Polished Brass, \$110; Nickel, \$120.

Ready for Delivery About October 1

Page Twenty-three





CHOICE OF THE ARTISTS



New Improved E^b Alto Saxophone—6M

THE new Conn alto saxophone is not an old model with a few new features—it has been entirely redesigned from mouthpipe to bell! It represents the most important development in saxophones since Conn made the first saxophone in America over forty years ago!

The scale of the new alto is remarkable for its even, uniform quality. The even spacing of the notes in the scale; the ease with which tones can be swelled to triple forte and diminished to double pianissimo; the thrilling tone quality free from any "fuzzy" or "stuffy" notes—these are features you'll find in this marvelous new instrument!

Mechanically the new alto is the sturdiest and fastest of all Conn saxophones. Without exception, every key has been improved in some manner—either in action or in strength.

Some of its outstanding improvements are: Longer cross hinges (the longest on any saxophone) that insure longer life and smoother action. . . . Redesigning of many keys, giving lighter, faster action, more perfect closing of tone holes and longer life to the pads. . . . The extensive use of wide bearing, long wearing pivot screws. . . . Hollow hinges that permit wear to be taken up easily and quickly. . . . Refinements in springing which make all keys work with the same even, light pressure.

In addition to the host of improvements, the new Conn alto also has many new and exclusive features such as the patented octave mechanism, now located under the mouthpipe; the new swivel thumb rest; the pad-protecting "water shed" in the low E^b socket, and others which, with the exclusive tuning device, drawn and rolled sockets, and the glassy-smooth inside surface, due to the Conn Hydraulic Expansion Process, make the new Conn alto the world's greatest value in saxophones today!

\$135

Satin silver,
gold burnished inside
bell, 6-M-2

-
-
-

Other Finishes

Polished brass, 6-M-4, \$100; nickel,
6-M-6, \$110; satin gold, 6-M-0, \$210, bur-
nished gold, 6-M-00, \$250.

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