

Prototype & Reference Tubas from the Holton Factory Reference Collection at the National Music Museum

May 24, 2014 10:00 AM Sweeney Hall
International Tuba-Euphonium Conference at Indiana University
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Northwestern Oklahoma State University



Holton Factory in Elkhorn, Wisconsin



Holton Short Action Upright (NMM 14,390)



- Specs
 - Recording bass (lacks bell)
 - Prototype
 - Model 106 Mammoth
 - Serial no. 118057
 - 1935
 - Catalogs
 - Sales Records



Short Action Valves

Specs – Stem height is 10 mm., average tuba today approximately 25 mm.

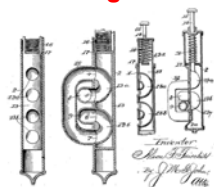
• Model 131
Sousaphone



• Holton advertised these valves as 28% shorter and 26% faster

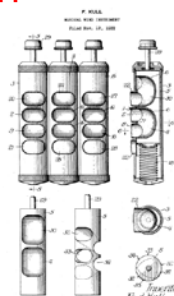


Drawings from Patent Applications



US Patent 1,457,623 (1923) A. Fairchild

- Specs
- Bell diameter: 24 1/2 in. (in catalog)
- Bore: .754 in. (1st valve branch)
- Pitch: BBb
- Serial number: 118057



US Patent 1,932,742 (1933) F. Kull

Allen type valve design (J. Lathrop Allen)



- American builder, active 2nd part of 19th century
- Rotary valve design
- Flattening of pipes to an elliptical shape as they enter the casing
- (NMM 13,976) Circular Cornet by Allen & Hall



Unsigned Experimental BBb Tuba NMM 13,807



Determining the Manufacturer

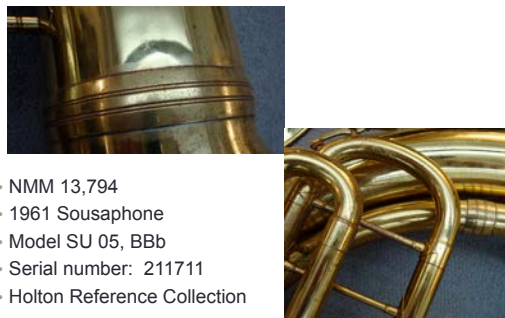
Clues



Considerations

- Companies
 - C. G. Conn
 - York
 - H. N. White (King)
 - Holton
 - Martin (RMC)
- Tuning Slide Lever
- Raw brass
- Braces, caps, decorations
- Valve design
- Catalogs

Pictures from Martin Tubas



- NMM 13,794
- 1961 Sousaphone
- Model SU 05, BBb
- Serial number: 211711
- Holton Reference Collection

Martin Band Instrument Co.

- To the Holton Factory
 - Martin plant in Elkhart, IN
 - Holton Factory Storage
 - *Some instruments came from 3rd floor storage*
 - *Martin became part of LeBlanc in 1971*
- Catalog picture ca. 1960



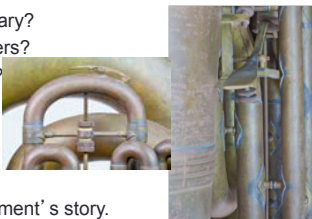
Specs NMM 13,807

- **Bell diameter:** 20 2/16 in. / 510 mm.
- **Bore:** .579 in. / 14.7 mm. (leadpipe – slides stuck)
- **Pitch:** BBb
- **Weight:** 27 lbs.
- **Serial number:** (ca. 1955 from Martin lists)
 - 194098



What 1950s – 1960s Retail Market?

- Public School – secondary
- Public School – beginners?
- College undergraduate?
- College graduate?
- Professional?
 - James Gourlay
- Resolution of this instrument's story.
 - "An Unsigned Tuba"
 - *Via email: a very similar model with detachable bell was made for the U.S. Navy Band in the 1950s. Custom Order.*





Another Martin Prototype

- NMM 13,830 specs
- Tuning slide lever
- Serial no. 203640
 - ca. 1957
- Bell: 10 in.
- Length: 27 – 11/16 in.




Valve pictures NMM 13,830

- Piston valves




NMM 13,827 Holton Euphonium B101 Leonard Falcone Artist Model

Upright, 4 valves



Serial number 521995
1973

Endorsed by Dr. Leonard Falcone, who assisted in its design



Contrabass Bugle (NMM 13,796) in a helical shape (Sousaphone)

No serial number
How dated – Letter to Vito
Larry Ramirez
(factory foreman)
1 piston valve
1 rotary valve





Fundamental - GG



NMM 13,796 Specs

- Piston valve
 - *lowers pitch perfect fourth*
- Rotary valve
 - *lowers pitch half step*

Specs

- Bell: 19 6/16 in.
- Bore: .697 in. (Piston)
- Pitch: GG
- Weight: 26 lbs.




Photo by Robert Brown, Boston
A unique, experimental Sousaphone bugle (NMM 13,796), as it was displayed at the Elliott factory prior to the 2009 closing. This model was designed by Holton for use in brass and bugle corps, but was rejected by players in favor of the contemporary, tuba-shaped, contrabass bugle.

A More Standard Bugle



Getzen G Bugle
NMM 6,967 (Utley)



NMM 13,945

Contrabass Bugle for Ludwig, by Holton (NMM 13,945)

- **Specs**
 - No signature
 - Attached tags:
 - Bugle Contrabass for Ludwig
 - Experimental, G-D
- **Pitch**
 - Based on length: C – G
 - Scooter Pirtle
 - Experimental time period
 - 1950s – 1960s
- **Other possibilities**
 - Bass Baritone Bugle
 - Interchangeable Rotary slide
 - C Bugles not in catalogs




Rotary valve (NMM 13,945)

- Spring on interior
- Built on the main tuning slide
 - Design used by several manufacturers
- Interchangeable slides were marketed

- **Weight**
 - Hold for 12 hours?

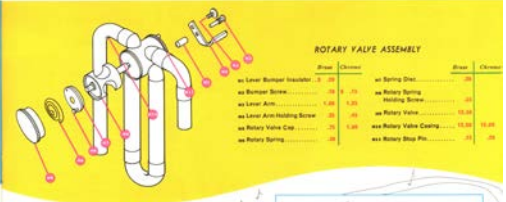
- **Specs**
 - Bell diameter: 9 15/16 in. / 253 mm.
 - Bore: .559 in. / 14.2 mm.
 - Pitch: CC
 - Serial number: 354353



Note: The instrument could date from as early as 1958, but not likely sooner.

Regardless, Vito ended bugle production post-Leblanc (1965).

1963 Ludwig Catalog





ROTARY VALVE ASSEMBLY			
#	Description	#	Description
1	Lower Bellows Headset	10	Valve Spring Shim
2	Bellows Screw	11	Valve Spring Holding Screw
3	Lower Arm	12	Valve Spring
4	Lower Arm Holding Screw	13	Valve Spring Shim
5	Rotary Valve Cap	14	Valve Spring Shim
6	Rotary Spring	15	Valve Spring Shim
7		16	Valve Spring Shim
8		17	Valve Spring Shim
9		18	Valve Spring Shim

BUGLE REPLACEMENT PARTS			
#	Description	#	Description
1	Specily Model	1	
2	Valve Cap (top)	3	Valve Cap (bottom)
4	Valve Cap (bottom)	5	Water Key Spring
6	Water Key Spring	7	Water Key Cork
8	Water Key Cork	9	Water Key (complete)

Ludwig

Mammoth Revelation Sousaphone

NMM 13,798
Bell spun by Mr. Howard Tess

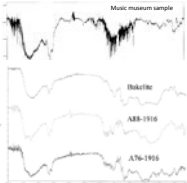

NMM 13,798 Specs




- Model 130 (pre-1931 version)
- Serial No. 91792
- 1926
- Mammoth BBb Holtonphone
- Low pitch
- Bell diameter: 30 inches
- Bore .801 (2nd valve slide)
- Hung at entrance to museum in the Holton Factory


Distal side of bell

- Flaking substance
- Silver-plated underneath
- Spray lacquer?
- Bakelite





Thank you!



- Cleveland Johnson, NMM Director
- Margaret Banks, NMM Associate Director & Senior Curator
- Janet Cunningham, NWOSU President
- Deborah Reeves, NMM Curator of Education & Woodwinds
- Josh Calkin, Wayne State College (Nebraska)
- Mike Knedler, NWOSU Dean of Arts & Sciences
- Dan Perantoni & Kelli Thomas, ITEC 2014 Coordinators

For more information, please visit the museum's website at orgs.usd.edu/nmm or Dr. Drobnak's website at drobnakbrass.com

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