Brasswind Manufacturing at Boosey & Hawkes, 1930-59

Arnold Myers

Introduction

The innovation and output of Boosey & Co. (up to 1930) were discussed in a previous article.¹ The period following the General Strike of 1926 through the depression of the 1930s and the Second World War was a period of severe contraction in the British musical instrument industry. In the 1920s trade was slack and some instruments were sent for silver-plating years after they had been made. The falling off in demand for brass band instruments was only partially counterbalanced by the new popularity of the dance band. During the Second World War, production of instruments was reduced as factories were required for war work. Immediately after the war, the export market was given priority, and instruments were available on the home market only from May 1946.²

Hawkes

The merger of Boosey & Co. operations with those of Hawkes & Son took place relatively quickly once the new company had been created in 1930. Hawkes & Son had in 1924-25 built the spacious factory at Deansbrook Road, Edgware, which could accommodate the combined manufacturing operation. The former Boosey manufacturing production was transferred from Frederick Mews, Stanhope Place, Marble Arch, to Edgware in the period 1931-32, which continued as the main Boosey & Hawkes plant until 2001. Management and sales were concentrated at the former headquarters and saleroom of Boosey & Co. at 295 Regent Street, although the Hawkes premises in Denman Street continued as repair shop for some time.³ The Hawkes & Son sequences of serial numbers were discontinued, the Boosey & Co sequence for brass instruments was continued, and indeed is still being used.⁴ Demand for existing successful models (of mouthpieces as well as instruments) from both firms continued to be satisfied for some time, a consolidated range of models, mostly based on Boosey & Co. designs, being established in the 1930s (see Appendix A).

On 1 January 1933 the remaining unfinished Hawkes & Son instruments were given Boosey & Hawkes serial numbers.⁵ Finally, on 5 January 1943 the last nineteen items of old Hawkes & Son stock were renumbered.

Rudall Carte

Boosey & Hawkes acquired the wind-instrument-making firm of Rudall Carte during the Second World War. Up to 1939 Rudall Carte had been makers of brass instruments, including (until 1933) the high-quality *Patent Conical Bore* brasswind and *Webster*

trumpets.⁶ The production of Rudall Carte flutes was continued by Boosey & Hawkes as a separate operation until the 1980s. Their use of the Rudall Carte brand name for brasswind seems to have been limited to mass-produced instruments in the 1950s, also stamped *Starline*.

Besson

The merger with the London firm of Besson & Co. was a much more protracted affair. Besson adopted Boosey's compensating pistons to replace their own *Enharmonic Patented* system in the mid-1920s.⁷ A formal arrangement was reached between the two firms when, commencing 29 September 1933, the former Boosey & Co. factory premises at Frederick Mews (vacated when Boosey & Hawkes moved production to Edgware) were leased to Besson & Co., who in turn vacated their old factory in Euston Road. Throughout the 1930s the design of Besson instruments often appears to have been copied from Boosey & Hawkes. From time to time the instruments were actually made for Besson by B & H, though according to the "pricing books" in the B & H archives they were cheap quality.

From March 1948 the manufacture of Besson-branded instruments was moved from the old Stanhope Place factory to the Boosey & Hawkes plant at Edgware. The Besson serial number sequence was continued up to October 1954, after which instruments stamped with the Besson name were given serial numbers in the Boosey & Hawkes sequence. It was at this time that distinct B & H and Besson models were replaced by common models. For example, a "Besson" *Westminster* model trombone of the 1960s differed only in engraving from the B & H *Regent* model. The premises at Frederick Close (formerly Frederick Mews) continued as the "Band Department, Instrument Division" until 1957.⁸ As a company however, Besson was not completely absorbed until 1 July 1968 when the final shares were purchased.

Information in the B & H Archive

A record survives in the Boosey & Hawkes archives for every brass instrument made by Boosey & Hawkes from 1930 to the present, and for Besson & Co. from 1948. Unfortunately, comparable records for Hawkes & Son and earlier Besson & Co. records are fragmentary. The B & H Instrument Books and Pistons Books continue uninterrupted the records of Boosey & Co. described in the previous article.⁹

The Instrument Books began to include details of engraving, written in hand from 30 March 1938; a further column for the name of the engraver was used from 9 November 1939. However, the entries in the Instrument Books became much less detailed from the 1940s onwards, as most instruments were from then on manufactured using mass production techniques. The "Date sent to polish" was entered only until ca. 1940. In the Pistons Books the serial numbers of made-up instruments were only sporadically entered from ca. autumn 1945, and entries then peter out, the last being on 19 October 1952.¹⁰

Gauge	inches	converted to mm (1 inch = 25.4mm)
bore 2	.4098	10.409
bore 3	.4342	11.029
bore 4	.4600	11.684
bore 5	.4874	12.380
bore 6	.5163	13.114
bore 7	.5470	13.894
bore 8	.5796	14.722
bore 9	.6140	15.596
bore 10	.6505	16.523
bore 11	.6892	17.506
bore 12	.7302	18.547

The code for bore sizes in use at the end of the period under discussion is given in a single sheet surviving in the B & H archives, headed "Gauge sizes" and dated 8 October 1954.

These are the bores used for valve construction and indicated in the Pistons Books. They agree well with measurements of valve tuning slide inner slide bores on surviving instruments described in the previous article. (The table also gives twelve smaller and twenty-two larger gauge sizes whose use is unknown.)

There are four smaller books, each entitled "Stamping Book." Three of these give brief details of Boosey & Hawkes brass instruments (17 November 1936-8 August 1951, 4 February 1937-13 April 1939, 5 January 1943-27 June 1947). They do not add to the information in the Instrument Books. The one Stamping Book for Besson instruments however is the only surviving record of Besson-branded instruments made at Edgware in the period 1948-54. The entries in this book are in chronological order rather than serial-number order, the dates given presumably being when the instruments were stamped with their inscriptions. The makers names are given: these clearly show that Besson brass instruments were made in this period by the same workforce as Boosey & Hawkes instruments.

A "Pricing Book 2" with entries for the period 1925-40 breaks down the production costs for standard models and special orders.¹¹ The actual hours spent making typical batches are recorded. It appears to have been kept by Arthur Blaikley. The archives also contain numerous plans and blueprints.

Pitch standards

Prior to the period under consideration, most British wind instruments were built at "Old Philharmonic" pitch, also known as "Kneller Hall Pitch," a^{1} = 452.5 Hz. Boosey & Co. orchestral and export instruments built at "International Pitch," a^{1} = 439 Hz, were generally stamped on the bell with *I.P.* in an ellipse; the Instrument Book entries were also

generally annotated "I.P." or "IP." British Services military bands changed to 439 Hz from 1929, leaving British and Commonwealth brass bands as the only sizeable area of musical activity at high pitch.

From mid-1931, low-pitch instrument stampings and Instrument Book annotations changed to "L.P." From ca. 1935, Instrument Book entries for 452.5 Hz instruments were more and more frequently annotated "HP," and the pitch standard is usually unambiguously clear in the archival records. The present standard ($a^{1} = 440$ Hz) was agreed internationally in 1939.

For ten years from 1954, brass instruments usually carried either the stamping "LP" or "HP." Following the absorption of Besson & Co., Boosey & Hawkes enjoyed a near monopoly of supply to brass bands, being by far the largest makers in Britain, and overseas makers no longer built "Old Philharmonic" pitch instruments. This was to continue until 1964, when the British manufacturers of brass band instruments (Boosey & Hawkes and the Salvation Army) announced their decision to cease production of high-pitch instruments.

Innovations

Arthur Blaikley, son of David James Blaikley, succeeded his father as factory manager of Boosey & Company from 1918. His interests seem to have been as much in machine tools as instruments: the plans and blueprints surviving in the B & H archives contain designs for numerous pieces of equipment for drawing and forming tubing, etc. His most notable development, in the 1930s, was the hydraulic expansion process for forming bows and other shaped tubing. His initials are last noted on a technical drawing in 1950. In this period of slack trade, many fewer new kinds of instruments were introduced than had been the case with Boosey & Co. However, a couple of innovations can be noted here.

Betty trombone

The addition of a rotary valve to the British bass trombone to give an instrument in G + D was not new in 1932.¹² However, from this date a line of very fine, relatively wide-bore bass trombones was produced by Boosey & Hawkes. Many of the entries in the Instrument Books designate these as "Betty model trombone" after the bass trombonist William Betty. An alternative valve tuning slide for C was provided for repertoire including a low Ab. Eighteen were made in the period to 1939 and a further twenty between 1947 and 1959.

The regular production of a Bb trombone with transposing cylinder to F started in 1933, and the production of rotary valve F and Bb double horns in 1935.

Kneller Hall fanfare trumpets

A prominent symbol of state occasions in Britain is the sight and sound of the long ceremonial valved trumpets with banners hanging from the bell. Boosey had been making so-called "Bach" trumpets since 1896, originally in A, later in Bb and high Eb or D. It appears from the Instrument Books that Aida trumpets had been more of a Hawkes and Son speciality. A set of Aida trumpets (two in Bb, two in Ab) was made in 1934. In June 1935,



Figure 1 Betty Model bass trombone (1938), collection of Douglas Yeo (photograph © Edinburgh University Collection of Historic Musical Instruments).

however, batches were made of "Bb Aida Trumpets [=cornet length] Hawkes Patn.," "Bb Tenor Aida Trumpets [i.e., Bb Trombones]," and "Bass Aida Trumpets [i.e., G Trombones]." In 1938 a soprano trumpet in Eb was added, and in this year the term "Coronation Trumpet" (referring to the coronation of King George VI) was also used for these instruments. They were subsequently approved by the Royal Military School of Music (Kneller Hall): the Instrument Books record that the four sizes were "Approved by KH as standard model 11.10.38." From this genetic mutation of Verdi's stage trumpets sprang the now traditional British fanfare trumpet.

In the period up to 1959 Boosey & Hawkes made 49 Eb soprano, 234 Bb melody, 146 Bb tenor, and 63 G bass fanfare trumpets. (The current production model of bass fanfare trumpet is in Bb rather than G.)



Figure 2

The "Kneller Hall" fanfare trumpets, described in a Besson catalogue ca. 1960 (author's collection).

North America

In the 1930s the North American market presented little opportunity to Boosey & Hawkes.¹³ Trade restrictions and dominance of firms such as Conn, H.N. White, Holton, and York allowed little penetration in the United States, and exports were mostly to Canada. It was probably for the Canadians that Boosey & Hawkes started making "bugles" in G with a single valve for D. Production started in 1938 of sopranos in 5¹/₂-ft G and baritones in 11-ft G.

The American influence was, however, felt in the design of orchestral and dance band instruments. From 1925 the Instrument Books record the production of a model designated "Olds Trombone," but the lack of a surviving example makes it impossible to determine the extent of American influence. The plans and blueprints in the archives contain a number of drawings of instruments, many noted as items in for repair or to be copied. Drawings survive of a Buescher *Grand* trombone in Bb (1925), Olds trombones (1933, 1935), a Conn large-bore tenor trombone with rotary valve (1933), a Buescher "Bach trumpet" (1931), and Vincent Bach trumpets (1922 and 1936) and a cornet. These may have influenced the

transition to wider-bore trumpets and trombones in the post-war era. The post-war re-design included mouthpieces: the archives contain detailed drawings for a range of *Kosikup* model mouthpieces dating from 1947 and mostly initialled "A.B."

Mass Production

The relatively inexpensive Boosey & Hawkes *Regent* model cornets, trumpets, and trombones produced from 1932 onwards were the first step toward mass production. Other cheap instruments were branded *Lafleur*.¹⁴ Manufacture changed with the introduction of hydraulic expansion of tubing, pioneered in the mid 1930s for the larger bows of big instruments and extended from 1950 to the branches (straight sections of tube). Later, all tubing was blown out under pressure. Bell making then became a separate operation, and instrument manufacture for the commoner models became more a matter of instrument assembly, as it is now.

The maker most usually in charge of mass production at first was Sheridan (probably the same Sheridan who had been a Boosey & Co. apprentice in 1929 and a maker by 1939). On 14 March 1945 he was identified as the maker of a batch of 100 instruments (earlier than this, the larger batch sizes were usually multiples of twelve). On 23 October 1945, the Instruments Book entry for a further batch of 100 instruments was annotated "(Line Production)," with Sheridan again named as the maker.

The Instrument Books in the late 1940s sometimes describe batches of instruments as "mass-produced." Batch sizes of 100 or 200 similar instruments were not uncommon. However the increase in the volume of brass instruments produced came later. In the period 1920-29 Boosey & Co. made an average of 2,923 brass instruments per year. In the period 1933-39 Boosey & Hawkes made an average of 2,723 per year: since Hawkes & Son had probably been making a similar volume of instruments before the merger, the poor market conditions are obvious. In the early post-war period 1946-54, Boosey & Hawkes made an average of 3,292 brass instruments per year; the average annual production in 1955-1959 of 22,176 shows the dramatic increase in production from the Edgware plant. To achieve this output, most of the operations were carried out by employees doing repetitive tasks. Where skills were required these were mostly drawn from the general North London engineering workforce rather than specialists who had worked their way up through a brasswind-making apprenticeship.

Conclusion

The material presented here is only a small fraction of the information contained in the archival records. The development of mechanized processes for some of the more labor-intensive operations in brass instrument making in the 1930s paved the way for the transition from manufacture in small batches with a degree of division of labor to mass production in the late 1940s and 1950s. This in turn allowed the company to increase brasswind production dramatically to supply the important brass band market, the lucrative educational market, and a growing export market in the post-war era.

Author's note: Further illustrations of Boosey & Hawkes brass instruments can be viewed via the World-Wide Web at <u>http://www.music.ed.ac.uk/euchmi/bpesy.html</u>

Arnold Myers completed his doctorate at the University of Edinburgh with research into acoustically based techniques for taxonomic classification of brass instruments. He contributed the chapter "Instruments and Instrumentation in Brass Bands" to the recent Oxford University Press book The British Brass Band: a Musical and Social History. He is the Director and Curator of the Edinburgh University Collection of Historic Musical Instruments, and edits the ongoing Catalogue of the Collection.

ACKNOWLEDGEMENTS

The author has been given the privilege of access to the instrument books and pistons books of Boosey & Hawkes and other archival documents thanks to the kindness of Jan Osman and John Rogers, Besson Musical Instruments Ltd. (formerly Boosey & Hawkes (Musical Instruments) Ltd.). Valuable information has also been provided by former Boosey & Hawkes employees Denis Lofthouse and Stewart Benzie. The help of Bradley Strauchen (The Horniman Museum) in work with the technical drawings in the archives has been much appreciated.

The following collectors and owners have been generous in allowing access and providing information about the instruments in their care: Jim Anderson, Murray Campbell, Niles Eldredge, Rick Flynn, Alan Gwynant (National Eisteddfod of Wales), Bruno Kampmann, Michael Lea (Powerhouse Museum, Sydney), Roland Lengauer, Tom Meacham, Henry Meredith, David L. Smith, Simon Styles, John Webb, Douglas Yeo.

APPENDIX A: Range of Models

These were the models offered in the period immediately following the merger of Boosey and Hawkes, according to the trade catalogue of Boosey & Hawkes, ca. 1935, Edinburgh University Collection of Historic Musical Instruments (R2677).

The catalogue does not include some instruments, such as circular basses and sousaphones quite frequently supplied or, of course, instruments made to special order. Bugles were listed under drums. The retail prices given (pounds/shillings/pence) are for brass finish; silver-plating cost 20% - 40% extra (proportionately more for larger instruments). Cases extra.

B4012	Contesting model cornet in Bb, NVA	£12/10/0
B4013	Contesting model cornet in Bb, NVA	
with	n rotary transposing cylinder Bb to A	£15/10/0
B4010	Acme Silbron model cornet in Bb, NVA	£11/10/0
B4011	Acme Silbron model cornet in Bb, NVA	
with	n rotary transposing cylinder Bb to A	$\pm 14/10/0$
B4026	NVA Eb soprano cornet	$\pm 12/10/0$
B4027	Contesting model Flugel horn in Bb	$\pm 12/10/0$
B4014	Clippertone-NVA trumpet with rotary transposing cylinder Bb to A	£16/0/0
B4015	NVA trumpet with	
rota	ry transposing cylinder Bb to A for either right or left hand	£14/0/0
B4017	Bach trumpet, D and Eb, 3 valves	£9/0/0
B4018	Bach trumpet, Bb and A, 3 valves	£9/0/0
D3101	Herald's or state trumpet [natural trumpet in Eb]	£4/0/0
B4019	Post horn in At with slide to tune to Ab	£1/16/0
B4020	10-inch hunting horn, brass or copper	£1/1/0
B4024	52-inch coach or drag horn, brass	£3/0/0
B4025	52-inch coach or drag horn, copper	£3/10/0
B4029	"Imperial" model Eb tenor horn	£14/0/0
	Tenor cor in F and Eb	£15/0/0
B4032	Bb baritone, small bore	£17/0/0
B4031	Imperial model Bb baritone, large bore, compensating pistons	£21/0/0
B4033	Imperial model Bb euphonium, four valve compensating pistons	£29/10/0
B4034	Imperial model Bb euphonium, three valve compensating pistons	£21/0/0
B4039	Artist's Perfected No. 1 standard model Bb tenor slide trombone	£11/10/0
B4040	Featherweight No. 2 model Bb tenor slide trombone	£13/0/0
B4042	G bass slide trombone	$\pm 12/10/0$
B4043	Bb tenor valve trombone, 3 valves	£14/0/0
B4044	G bass valve trombone, 3 valves	£16/0/0
B4037	Eb standard bass, 3 valves	£24/0/0
B4045	Eb standard bass, three valve compensating pistons	£30/0/0

B4048	Eb standard bass, four valve compensating pistons	£35/0/0
B4035	EEb bass Imperial model, three valve compensating pistons	£35/0/0
B4036	EEb bass <i>Imperial</i> model, four valve compensating pistons	£42/0/0
B4038	BBb bass Imperial model, three valve compensating pistons	£42/0/0
B4041	BBb Standard model bass, 3 valves, monster bore	£37/0/0
B4046	Sotone No. 1 french horn in A-natural, small bore, complete with	
A a	nd F crooks	£20/0/0
B4047	Sotone No. 2 french horn in A medium bore,	
con	plete with A and F crooks	£20/0/0
B4049	<i>Imperial</i> model large bore horn in A ^t , with A and F crooks	£24/0/0
B4050	New Century model large bore horn, 4 valves	
(4tł	n valve for rapid transition from F to Bb alt) compensating pistons	£34/0/0
B4051	<i>Emperor</i> model double horn, large bore, 4 rotary valves	£52/0/0

A new system of model numbers was introduced in 1935 that reflected the consolidation of the range of models after the merger of Boosey and Hawkes. For a few years after October 1935, many of the entries in the *Instrument Books* indicated both the old Boosey & Co. numbers and the new. This allows the history of many models made in the mid-twentieth century to be traced back to their origins in the nineteenth century. The following correspondences occur:

New number model Boosey & Co. number A6 or A6b Cornet in Bb B4012 B4013 Cornet in Bb with rotary transposing cylinder A6 B4010 Cornet in Bb A3 B4011 Cornet in Bb with rotary transposing cylinder A4b B4026 Eb soprano cornet A12 B4027 Flugel horn in Bb A31 Trumpet with rotary transposing cylinder B4015 A18 B4029 Eb tenor horn A47 B4030 Tenor cor in F and Eb A39 Bb baritone, small bore A50 B4032 Bb baritone, large bore, compensating pistons B4031 A51 B4033 Bb euphonium, four valve compensating pistons A82 B4034 Bb euphonium, three valve compensating pistons A79 B4043 Bb tenor valve trombone, 3 valves A66 Eb standard bass, 3 valves B4037 A85 B4045 Eb bass, three valve compensating pistons A86 B4048 Eb bass, four valve compensating pistons A90 B4035 EEb bass, three valve compensating pistons A87

B4036	EEb bass, four valve compensating pistons	A91
B4038	BBb bass, three valve compensating pistons	A95a

The instruments not listed were either not made in the eight years after October 1935, when both numbers were recorded, or were Hawkes & Son models, or were post-merger new models. In particular the models of slide trombone adopted by Boosey & Hawkes were the former Hawkes & Son models, as was the *Clippertone* trumpet.

Boosey & Co. had stamped their best instruments *CLASS A* and their student models *CLASS B*. The *CLASS B* stamp was discontinued by Boosey & Co. in the 1920s, although the B model numbers continued to be used in the *Instrument Books*. After the merger Boosey & Hawkes re-branded their student instruments *Regent*. In some cases the instruments were stamped *The Regent Band Instrument Company*. The trading name *British Band Instrument Company* was also used in the mid-twentieth century. Similar correspondences can be made for *Regent* instruments from the instances where both numbers were recorded:

New number model Boosey & Co. num		
R718	Cornet in Bb	B2
R719	Eb soprano cornet	B11
R720	Flugel horn in Bb	B30
R722	Tenor horn	B46
R728	Tenor cor	B38
R723	Bb baritone	B49
R725	Bb euphonium	B77
R726	Bb euphonium	B80
R716	Bb tenor slide trombone	B54
R717	Bb tenor slide trombone, medium bore	B54
R724	G bass slide trombone	B56
R729	Eb bass	B84
R730	Eb bass	B88
R732	BBb bass	B92

APPENDIX B: Serial numbers

Boosey & Hawkes brasswind serial numbers

This table gives the lowest serial number recorded for each period.

Number	Date order given out
138565	1931 Jan. 1 - Dec. 31
140164	1932 Jan. 4 - Dec. 24 [added Hawkes]
141820	1933 Jan. 2 - Dec. 29
143643	1934 Jan. 2 - Dec. 27
145199	1935 Jan. 1 - Dec. 31
146673	1936 Jan. 2 - Dec. 31
148811	1937 Jan. 5 - Dec. 31
151140	1938 Jan. 4 - Dec. 23
153435	1939 Jan. 2 - Dec. 28
155743	1940 Jan. 1 - Dec. 31
157769	1941 Jan. 4 - Dec. 30
159290	1942 Jan. 6 - Dec. 21
159898	1943 Jan. 5 [old Hawkes stock re-numbered]
159917	1943 Jan. 12 - Dec. 30
160568	1944 Jan. 3 - Dec. 21
161408	1945 Jan. 2 - Dec. 21
162943	1946 Jan. 2 - Dec. 31
165575	1947 Jan. 1 - Dec. 30
169451	1948 Jan. 1 - Dec. 31
172247	1949 Jan. 3 - Dec. 29
174903	1950 Jan. 4 - Dec. 27
177608	1951 Jan. 2 - Dec. 27
180519	1952 Jan. 1 - Dec. 31
182842	1953 Jan. 1 - Dec. 15
185201	1954 Jan. 6 - Dec. 31
192569	1955 Jan. 3 [added Besson]
211560	1956 Jan. 2
239221	1957 Jan. 1
269345	1958 Jan. 1
288450	1959
303448	1960 Jan. 4
319805	1961 Jan. 2
336897	1962 Jan. 11
360417	1963 Jan. 7

380601	1964 Jan. 6
400825	1965 Jan. 12
414064	1966 Jan. 3
430724	1967 Jan. 16
446028	1968 Jan. 9
464976	1969 Jan. 6

Besson & Co valved brass serial numbers

This table gives the highest serial number recorded for each period.

Number	Date entered in stamping book
135862	1948 Mar. 11 - Dec. 29
136461	1949 Jan. 3 - Dec. 21
140149	1950 Jan. 5 - Dec. 19
142837	1951 Jan. 1 - Dec. 21
144496	1952 Jan. 1 - Dec. 30
146394	1953 Jan. 5 - Dec. 29
146396	1954 Jan. 4 - Oct. 25

Besson & Co slide trombone serial numbers

This table gives the highest serial number recorded for each period.

Number Date	entered in	stamping	book
-------------	------------	----------	------

15201	1948 Mar 17 - Dec 7
1,5252	
15253	1949 Jan. 26 - Nov. 29
15509	1950 Jan. 9 - Dec. 19
15965	1951 Jan. 3 - Dec. 5
16429	1952 Jan. 7 - Dec. 19
16729	1953 Mar 12 - Dec. 23
17207	1954 Jan. 29 - Oct. 13

APPENDIX C: Trade Marks



Figure 3 Hawk-and-trumpet trademark. Bell stamp used from 1931 to December 1947.

Photographs: Raymond Parks (Figures 3-5); Figure 6 courtesy of the Powerhouse Museum, Sydney, Australia (Photo: Michael Lea).



Figure 4

Trademark of sixteenth note on five-line stave sweeping to globe showing Atlantic Ocean. Bell stamp occasionally used from 1948.



Figure 5 Registered trademark of sixteenth note on 5-line stave sweeping to "B & H" superimposed on globe. Bell stamp used from 1966 or 1967.



Figure 6

Bell stamp with Palace of Westminster clock tower motif used for student grade instruments with the Besson brand circa 1959.

NOTES

¹ Arnold Myers, "Brasswind Innovation and Output of Boosey & Co. in the Blaikley Era," *Historic Brass Society Journal* 14 (2002): 391-423.

² Boosey & Hawkes Ltd advertisement, *British Bandsman*, 4 May 1946, p. 3; Besson advertisement, *British Bandsman*, 25 May 1946, p. 5.

³ Trade Catalogue of Boosey & Hawkes, ca. 1935. Edinburgh University Collection of Historic Musical Instruments (R2677).

⁴ Of surviving instruments, the earliest stamped *Boosey & Hawkes* is a tenor horn formerly in the author's collection, serial number 138521, one of a batch of six given out 19 December 1930; charged to Regent Street on 30 December 1935. This long delay in the completion is typical of this period. The most recent surviving instrument stamped *Boosey & Co.* is a cornet in the collection of Henry Meredith, serial number 139426, one of a batch of six given out 6 August 1931; charged to Regent Street on 31 August 1931.

⁵ The most recent surviving instruments stamped Hawkes & Son are a pair of Hawkes model Bach Trumpets belonging to the National Eisteddfod of Wales: two from a batch of six given to polisher on 19 June 1933; charged to Regent Street on 27 June 1933, three of which were given Hawkes & Son serial numbers, the other three Boosey & Hawkes numbers.

⁶ Frank Tomes and Arnold Myers, "Rudall Carte's Patent Conical Bore Brasswind and Webster Trumpets," *Historic Brass Society Journal* 7 (1995): 107-22.

⁷ The latest Enharmonic Patented instrument so far identified is a Bb cornet, serial number 114209, probably made 1922-23 (collection of Tom Meacham, Alaska). The earliest Besson & Co compensator is a bombardon in Eb, 3-valve compensating, serial number 119357, probably made ca. 1925 (Edinburgh University Collection of Historic Musical Instruments No. 3419).

⁸ Advertisements in the weekly *The British Bandsman*.

9 Myers, "Brasswind Innovation."

¹⁰ The highest pistons serial number entered is 144241. The highest pistons serial number so far identified stamped on a surviving instrument is 147705, the pistons number on an Eb cornet made in 1955, now in the collection of David Smith, New Zealand.

¹¹ A "Pricing Book 1" and a small leather-bound notebook stamped on the front cover "Ledger" which appear to have been kept by D.J. Blaikley contain similar information for 1857-83 and 1876-80 respectively.

¹² See Cecil Forsyth, *Orchestration*, 1st edn. (London: Macmillan, 1914), where such an instrument was reported to be used by Mr. Gutteridge.

¹³ Jean-Pierre Mathez ("Boosey & Hawkes: un renouveau spectaculaire," *Brass Bulletin* 85 [1994]: 80-87) records that after the Second World War, Ralph Hawkes devoted himself to developing the American branch of Boosey & Hawkes in New York.

¹⁴ William Waterhouse (*The New Langwill Index of Musical Wind-Instrument Makers and Inventors* [London: Tony Bingham, 1993]) records that Boosey & Co. acquired the manufacturing and importing business of J.R. Lafleur & Son in 1917.