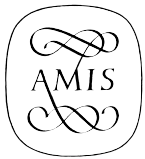
Journal of the American Musical Instrument Society

VOLUME XXVII • 2001



Charles G. Christman, Musical Instrument Maker in Nineteenth-Century New York

Robert E. Eliason

Charles G. Christman was a musical instrument maker and dealer in New York City for at least thirty-five years, from 1823 until 1858. His business included manufacturing, importing, and marketing musical instruments, and publishing music. He was granted a patent for improvements to the flute in 1849, and from 1823 to 1853 he exhibited a large number of instruments at mechanics' fairs in Philadelphia, New York, and Boston. An interesting variety of surviving instruments bears his stamp, as shown in table 1, and advertisements and exhibit records reveal at least the one-time existence of still other types. In all, there is evidence of one sort or another that Christman manufactured or marketed flutes, flageolets, flute/flageolets, oboes, clarinets, bassoons, cornets, trumpets, post horns, bugles, keyed bugles, trombones, Saxhorns, tubas, harmonicas, accordions, guitars, pianos, and double basses.

Although he may have made other types of instruments or had them made in his shop by other workmen, Christman was principally a flute maker. His only known patent concerned improvements to the flute, most of his exhibits at mechanics' fairs included flutes, and the majority of surviving Christman instruments are also flutes. Next in importance are brass instruments, for they too appeared often in his exhibits and are well represented among his surviving instruments. Whether these were made in his shop, obtained through connections with German relatives, or imported from elsewhere is not clear. Christman's business evidently began as a shop making flutes and other woodwinds, and then, like many other shops of the period, developed into a retail business marketing his own and imported products, and eventually publishing music.

Biography

Charles Gottlieb Christman was born in Danzig, Prussia, on October 20, 1799.[1] It is possible that he was the son of B. Christman, a musical

1. Department of Health of the City of Brooklyn, N.Y., Certificate of Death 11803, November 1, 1884.

Table 1. Surviving Instruments by C. G. Christman

Type	Owner and place (cat. no.)	Keys*	Material	Trim	Other details	Inscription†
fife	Timothy Holmes, Lincoln Park, Mich.		boxwood	brass		PEARL ST. / NEW YORK
flute F	Robert Eliason, Lyme, N.H.	1 brass, flat round	boxwood	ivory	unicorn	404 / PEARL ST. / NEW YORK
flute F	Peggy Baird, Huntsville, Ala.	1 G. silver, flat round	rosewood	G. silver		404 / PEARL ST. / NEW YORK
flute	Timothy Holmes, Lincoln Park, Mich.	1 silver, dome	rosewood	ivory	unicorn	404 / PEARL ST. / NEW YORK
flute	The Farmers' Museum, Cooperstown, N.Y. (N-246.44)	1 brass, flat round	boxwood	ivory		404 / PEARL ST. / NEW-YORK
flute	Timothy Holmes, Lincoln Park, Mich.	4 (missing)	rosewood	ivory	lined head, unicorn	404 / PEARL ST. / NEW YORK / PATENT
flute	Library of Congress (60)	4 G. silver, flat round	rosewood, ivory	G. silver	lined ivory head	404 / PEARL ST. / NEW YORK
flute	Library of Congress (927)	4 brass, flat round	rosewood	ivory		404 / PEARL ST. / NEW YORK
flute	Jean Gabel, Huntsville, Ala.	4 G. silver, dome (2 missing)	rosewood	G. silver	lined head	404 / PEARL ST. / NEW YORK
flute	Avrahm Galper, Toronto	4 brass, dome	boxwood	ivory	lined head, unicorn	404 / PEARL ST. / NEW YORK
flute	Caroline Cook, Lincoln, Mass.	4 G. silver, flat round	cocus	ivory	lined head, unicorn	404 / PEARL ST. / NEW YORK / for J. Gass St. Louis, Mo.
flute	Randy Reese, Redwood City, Calif.	4 silver, dome	boxwood	ivory		398 PEARL ST. / NEW-YORK
flute	Douglas Koeppe, Sr., League City, Tex.	4 brass, flat square (2 keys, 1 touch missing)	boxwood	ivory	end cap missing	398 PEARL ST. / NEW-YORK
flute	Douglas Koeppe, Sr., League City, Tex.	4 G. silver, dome	boxwood	ivory	lined head, unicorn	404 PEARL ST. / NEW-YORK
flute	Hammy Hamilton, Ireland	4	[unable to examine]			
flute	Janet Bergman, Chicago, Ill.	4	[unable to examine]			

Table 1. *continued*

Type	Owner and place (cat. no.)	Keys*	Material	Trim	Other details	Inscription†
flute	Shrine to Music Museum (2735)	4 silver, dome	boxwood	ivory	lined head	404 / PEARL ST. / NEW YORK / PATENT
flute	Lynn, Mass. Hist. Soc. (899)	4 silver, dome		ivory	lined head	398 / PEARL ST. / NEW YORK
flute	Essig Collection, Warrensburg, Mo. (245)	4 brass, flat square	boxwood	ivory		404 / PEARL ST. / NEW YORK
flute F	Los Angeles County Museum (A.3976-42)	4 brass, flat round?	boxwood	ivory		PEARL ST. / NEW YORK
flute	Vintage Instruments, Philadelphia, Pa.	4 G. silver, dome	boxwood	ivory	lined head	404 / PEARL ST. / NEW YORK / PATENT
flute	Library of Congress (121)	6 G. silver, dome	rosewood	ivory	lined head	398 / PEARL ST. / NEW YORK
flute / flageolet F	Old Sturbridge Village, Mass. (10.17.31)	6 brass, flat round	boxwood	ivory	unicorn	404 / PEARL ST. / NEW YORK / PATENT
flute	Robert Eliason, Lyme, N.H.	8 G. silver (6 dome, 2 pewter plug)	rosewood	silver	lined head	398 / PEARL ST. / NEW YORK
flute	John Bowman, Sunnyside, N.Y.	8 silver (6 dome, 2 pewter plug)	rosewood	silver, decorated ferrules	lined head with silver embouchure band	404 / PEARL ST. / NEW YORK
flute	Linda Bryant, Niagara Falls, N.Y.	8 G. silver	rosewood	G. silver		[398?] PEARL ST. / NEW YORK
flute	Duke University, Durham, N.C. (61)	8 G. silver (6 dome, 2 pewter plug)	rosewood	G. silver	lined head, G♯ key crosses joint	NEW YORK / PATENT
flute	William Greeley, Midland, Mich.	9 G. silver, dome, extra touch for B♭	ebony or rosewood	G. silver	lined head, tuning mechanism, B foot	398 PEARL ST. / NEW YORK / PATENT
flute	Douglas Koeppe, Sr., League City, Tex.	10 silver (8 dome, 2 pewter plug), low C & C♯ with rollers, short F & F♯ with double rollers, extra touch for B♭, silver saddles in block mounts	rosewood, ivory head w / silver band	silver	lined ivory head with silver band, F♯ key, high D / E? trill key, double springs, leather covered wood case	398 PEARL ST. / NEW YORK / PATENT (1837 exhibit instrument?)

clarinet C	Douglas Koeppe, Sr., League City, Tex.	5 brass, flat round	boxwood	ivory	rosewood mouthpiece	404 PEARL ST. / NEW YORK
clarinet B♭	Metropolitan Museum of Art (1995.398.2)	5 brass, flat round	boxwood	ivory	unicorn	404 / PEARL ST. / NEW YORK
clarinet A	Stearns Collection, Ann Arbor, Mich. (621)	10 brass, flat round	stained boxwood	ivory		NEW YORK
clarinet B♭	Kevin Boles, San Mateo, Calif.	13 brass, dome (6 missing), post and axle mounts	boxwood	ivory	hole covers riveted to key shanks; barrel missing	NEW YORK
bassoon	Henry Ford Museum (81.88.1)	5 brass, flat octagonal	maple	brass	"5006" on one key	NEW YORK
keyed bugle B♭	Vintage Instruments, Philadelphia, Pa.	6 brass, flat round	copper	brass		N. YORK
keyed bugle E♭	B. J. Pino, Home, Pa.	8 missing	copper	brass		NEW YORK
keyed bugle E♭	Mark Elrod, Germantown, Md.	9 G. silver	copper	G. silver		MANUFACTURED BY . . . . . 404 PEARL ST. NEW YORK
trombone	Moravian Museum, Bethlehem, Pa.		brass	G. silver		NEW YORK
trombone	Mark Elrod, Germantown, Md.		brass		loop before bell	NEW YORK

*dome = dome-shaped or saltspoon-shaped; G. silver = German silver or nickel silver
†All inscriptions begin with C. G. CHRISTMAN / ....

instrument maker active in Danzig early in the nineteenth century. A Benjamin F. Christman active in Danzig from 1839 to 1870 may have been a younger brother.[2] C. G. Christman probably came to the United States in his early twenties, as he was first listed in the New York city directory of 1823.[3] Passenger lists for ships arriving in New York during the period 1815–1825 do not include him, however. He became a naturalized U.S. citizen rather late in his life, on September 27, 1876.[4]

Christman married about 1825 and had a son Benjamin F. (1827) and a daughter Adeline (1830). His first wife's name is not known. After her death he married Catharine[5] (born c. 1818 in France) about 1847 and had four additional daughters: Emma (1848), Minnie (1853), Caroline (1855), and Catharine (1857).[6]

An active member of the Masons, Christman was elected Secretary (1835–37) and Senior Warden (1838) of German Union Lodge 322, Secretary of Pythagoras Lodge 86 (1841), and Master of German Union Lodge 54 (1846).[7] He also seems to have been a member of the Oddfellows Getty's Lodge No. 11, as evidenced by a song he composed and published in 1841, dedicated to the "Grand Lodge of the State of N.Y."[8]

It is not clear where Christman lived before 1850. Although he probably lived in or near his shops, no 1830 or 1840 census records of his residence have been found that might give clues to his increasing success. Census records of 1850 show him living in New York, and owning real estate valued at $3,000.[9]

2. Herbert Heyde, *Musikinstrumentenbau in Preussen* (Tutzing: Hans Schneider Verlag, 1994), 391.

3. *Longworth's American Almanack, New-York Register, and City Directory* (New York: Thomas Longworth, 1823), included in the microfilm collection *City Directories of the United States* (Woodbridge, Conn.: Research Publications, 1983).

4. Kings County, N.Y., county court naturalization record C623.

5. The New York City census of 1850 lists Christman's wife as Barbary, age 32 (too young to be the mother of his older children), born in Germany. Later Brooklyn censuses all list a wife named Catharine born the same year as Barbary, but in France. Since all the children of the second marriage, including the oldest born in 1848, list their mother as having been born in France, could Christman have mistakenly put down his first wife's name and place of birth with his second wife's age three years after their marriage?

6. 1850 Census records, New York City, Ward 4, p. 82; 1860 Census records, Brooklyn, N.Y., 2nd District, 4th Ward, Kings County, p. 812.

7. Archival records of New York City German Union Lodges 322 and 54; archival records of New York City Pythagoras Lodge 86.

8. Charles G. Christman, Member of the Getty's Lodge No. 11, "The Odd Fellows' Grand March," New York: C. G. Christman, 404 Pearl St.

9. 1850 Census records, New York City, Ward 4, p. 82.

He retired from active instrument making in 1858 and moved to Brooklyn, just a short ferry ride across the East River. The 1860 U.S. Census of Brooklyn gives Christman's profession as Musical Instrument Manufacturing and shows real estate worth $4,000 and a personal estate of $1,000. The 1870 U.S. Census of Brooklyn gives Christman's profession as Musical Instruments and shows real estate worth $6,000 belonging to his wife (though this may have been entered in the wrong row). The 1880 U.S. Census of Brooklyn shows Christman (spelled Crisman), age 81, and his family, but gives no real estate or personal estate values and no profession.[10] The Brooklyn city directories list his profession variously as "Musical Instrument Maker," "Instrument Maker," "Manufacturer," "Musical Instruments," or "Music" from 1859 until 1885, the year after his death.[11]

Although he was listed in the Brooklyn City Directories and census records as a musical instrument manufacturer until his death, there is no evidence that he maintained a shop outside his home, and no instruments bearing a Brooklyn address have been found. Christman died at the age of 85, on October 29, 1884.[12] His death certificate states that he had lived in Brooklyn for thirty years (from about 1855) and in the United States for fifty years; however, at least the latter figure is probably inaccurate, as New York City directories place him in this country starting in 1823, more than sixty years before his death. No will or administration has been found, but the death certificate lists him as a widower, indicating that his second wife also preceded him in death.

Business History

Clues to the progress of Christman's business can be found in his city directory listings (see table 2) and mechanics' exhibit entries (table 3), as well as in Masonic lodge records and advertisements. City directory

10. 1860 Census records, Brooklyn, N.Y., 2nd District, 4th Ward, Kings County, p. 812; 1870, p. 383; 1880, p. 39.

11. *The Brooklyn City Directory, for the year ending May 1st, 1859 [–1868]* (Brooklyn: J. Lain, 1858–1867); *The Brooklyn City and Business Directory, for the year ending May 1st, 1869 [–1880]* (Brooklyn: Lain & Co., 1868–1879); *The Brooklyn Directory, for the year ending May 1st, 1881 [–1883]* . . . (Brooklyn: Lain & Co., 1880–1882); *Lain's Brooklyn Directory, for the year ending May 1st, 1884 [–1885]* . . . (Brooklyn: Lain & Co., 1883–1884) (all included in the microfilm collection *City Directories of the United States,* cited in note 1 above).

12. Obituary of Charles G. Christman, *Brooklyn Daily Eagle,* October 30, 1884; and his death certificate, cited in note 1 above.

Table 2. City directory listings for C. G. Christman

New York*	
1823	mus. instr. mkr. Bedford corner of Burton
1824–25	mus. instr. mkr. 64 & 80 Crosby
1826	mus. instr. mkr. Bedford near Commerce
1827–28	mus. instr. mkr. 79 Bedford
1829–37	mus. instr. mkr. 398 Pearl
1837–42	mus. instr. mkr. 404 Pearl
1843–45	importer 404 Pearl
1846–51	mus. instrs. 404 Pearl
1852	mus. instrs. 605 Broadway & 404 Pearl
1853–54	mus. instrs. 404 Pearl
1855–57	mus. instrs. 391 Pearl
New Orleans†	
1852	music store 37 Canal (B. F. Christman)
1853–55	music store 91 Canal (B. F. Christman)
1857	music store 37 Canal (C. G. Christman & son)

*For a listing of these directories see Nancy Groce, *Musical Instrument Makers of New York, A Directory of Eighteenth- and Nineteenth-Century Urban Craftsmen* (Stuyvesant, N.Y.: Pendragon Press, 1991), 198. For a listing of all city directories see *City Directories of the United States, 1860–1901: Guide to the Microfilm Collection* (Woodbridge, Conn.: Research Publications, 1983). Despite its title, this source contains a listing of all the city directories to 1901 including those before 1860.

†*Cohen's New Orleans and Lafayette directory; including Carollton, Algiers, Gretna and M'Donogh, for 1852, 53, 54, 55; Mygatt & Co.'s directory, New Orleans.* 1857.

information is important in showing the location of a business each year and the business owner's characterization of his business. Since many instruments are marked with a street address, they can be dated to some extent by city directory address changes. Location in relation to better areas of the city can indicate a level of success, and changes in the character of the business can often be seen in how the owner words his entry.

Mechanics' exhibits were fairs where the latest manufactured products and inventions were displayed and judged. They were held in most major manufacturing cities periodically, if not yearly, and were an important means of advertising new developments and stimulating excellence in manufactured goods. The catalogs and records of these events are important in showing when products were introduced, who was making them, and how they were evaluated by a judging panel of the makers' peers. Silver and bronze medals and diplomas were presented for impor-

tant new designs and outstanding workmanship for either a single product or the entire display.

At first, the directories show Christman as simply a musical instrument maker at various addresses some distance from the heart of New York commercial activity (see table 2). During his career New York makers were scattered all over Manhattan, and there does not seem to have been any specific instrument makers' area until the decades following his retirement.[13] There was, however, a small concentration of woodwind makers in the area around Pearl Street, to which he moved his shop in 1829. Among his neighbors at about that time were Firth and Hall (1821–1831) and Thomas Longhurst (1833–1839) on Pearl Street itself, while Edward Riley Sr.'s shop was nearby on Chatham (1811–1831), as was Edward Baack's residence at 28 Cherry (1837–38) and his shops at 55 Gold (1839–44), 81 and 87 Fulton, and 72½ Chatham (1845–70).[14] This area was near the wharves just north of the center of the commercial district of New York and was certainly a good, if not an ideal, location for a combination of manufacturing, importing, and retailing. At that time Pearl Street was synonymous with commerce in the same way that Wall Street was (and still is) with finance. Pearl Street was among the first to have gas lighting after its introduction in 1825 and was central to the growth of retail shops with storefront displays.[15]

Among the first indications of Christman's success are the exhibits of his instruments by George Willig[16] at the 1828, 1830, and 1831 Franklin Institute fairs in Philadelphia; in the latter year, Christman advertised as "Manufacturer of Accordions, Harmonicas, and Musical Wind Instruments,"[17] indicating a broader range of business than just a woodwind

13. Maiden Lane became a center of the musical instrument trade between 1850 and 1880. More than a dozen makers worked there at one time or another during those years, at shops numbered between 10 and 58. Maiden Lane runs across Manhattan from the East River to Broadway about three blocks north of Wall Street and intersects Pearl Street several blocks south of Christman's addresses.

14. Nancy Groce, *Musical Instrument Makers of New York, A Directory of Eighteenth- and Nineteenth-Century Urban Craftsmen* (Stuyvesant, N.Y.: Pendragon Press, 1991), 52 (Firth & Hall), 99 (Longhurst), 131 (Riley), and 5 (Baack). The 1844 directories show James Clearman, profession "Mus. Instrs.," at the same address as Christman on Pearl, but the nature of their relationship is unknown.

15. Edwin G. Burrows and Mike Wallace, *Gotham, A History of New York City to 1898* (New York, Oxford: Oxford University Press, 1999), 612.

16. George Willig was a prominent musical instrument dealer in Philadelphia and evidently exhibited Christman instruments he had for sale.

17. Groce, 30.

Table 3. Mechanics' exhibit entries by C. G. Christman*

Franklin Institute of Philadelphia

1828	two flutes, two patent double flageolets, one harmonic pocket bugle (probably exhibited by G. Willig)
1830	one double flageolet (exhibited by G. Willig)
1831	one flute (exhibited by G. Willig)

American Institute of the City of New York

1835	flutes, clarinets, trumpets, post horns; "for the best specimens of flutes, clarionets, trumpets and post horns, a silver medal"
1844	double bass; "for a fine model and beautiful workmanship, a silver medal"
1845	flutes, clarinets, guitars; "for best exhibition of musical instruments, a silver medal"
1846	five flutes (one with sixteen keys), two guitars, three clarinets, two bugles; "for good workmanship on a 16 keyed flute, diploma; for a guitar, diploma; for a keyed bugle, diploma"
1850	diatonic flute, clarinet, oboe; "for the workmanship on a diatonic flute, diploma; for fine brass instrs, clarionet and hoeboy, silver medal"
1851	Christman served as judge
1853	diatonic and Boehm flutes, royal Kent bugle, cornet, clarinets; "for the best diatonic and Boehm flutes, royal Kent bugle, cornet, and clarionets, silver medal"

Massachusetts Charitable Mechanics' Association

1837	10-key flute; "only exhibitor of flutes, silver medal for a 10 key"
1841	2 flutes ". . . the committee . . . pronounce the flutes manufactured by W. J. Davis, superior to any or all of the others. . . . The latter [Christman's] the committee consider the best, especially in the mechanical part. One of the former [Pfaff's] they pronounce a very ordinary piece of work; the other somewhat better, but still inferior to Christman's."

New York Crystal Palace

1853	flutes, clarionets, trumpets, saxe-horns, bugles, tuba

*Information in this table comes from the following sources:

Franklin Institute

Papers and manuscripts relating to the American Manufactures Exhibitions at the Franklin Institute Library, Philadelphia, Pa.

1828 Manuscript catalog of the Franklin Institute exhibit of 1828, class 15, musical instruments, exhibit items 271–273.

1830 Manuscript catalog of the Franklin Institute exhibit of 1830, exhibit item 255.

1831 Manuscript catalog of the Franklin Institute exhibit of 1830, exhibit item 520.

A. I. N. Y.

Papers and manuscripts relating to the American Institute of the City of New York mechanics' fairs at the New York Historical Society, New York, N.Y.

1835 *Journal of the American Institute of the City of New York,* vol. 1, No. 2, November 1835, 79.

1844 *Catalogue Containing a Correct List of Every Article Exhibiting at the Seventeenth Annual Fair of the American Institute of the City of New York, 1844,* 21, exhibit item 1106.

1846 *Annual Report of the American Institute of the City of New York to the New York State Agricultural Society, February, 1846* (Albany: Carrol and Cook, printers to the assembly, 1846) Premiums Awarded in the Department of Manufactures and the Arts at the 18th Annual Fair, October, 1845, 135.

1846 *Catalogue . . . Nineteenth Annual Fair of the American Institute of the City of New York, 1846,* 21, exhibit item 977.

1850 "List of Premiums Awarded by the Managers of the Twenty-third Annual Fair of the American Institute of the City of New York, October, 1850," in *Transactions of the American Institute of the City of New York, for the Year 1850* (Albany: Charles Van Benthuysen, 1851), 22.

1851 *Transactions of the American Institute of the City of New-York, 1851* (Albany: Charles Van Benthuysen, printer to the legislature, 1852), 642.

1853 *Transactions . . . , 1853,* 550.

Charitable Mechanics' Assoc.

1837 *First Massachusetts Charitable Mechanics' Association Catalogue* (Boston: Henry Prentiss, 1837), 42.

1841 *Third Massachusetts Charitable Mechanics' Association Catalogue* (Boston: Henry Prentiss, 1841), 84.

Crystal Palace

1853 *Official Catalogue of the New-York Exhibition of the Industry of All Nations* (New York: George P. Putnam & Co, 1853), 95.

shop. He also exhibited at the American Institute of the City of New York fair in 1835 and was awarded a silver medal "for the best specimens of flutes, clarionets, trumpets and post horns."[18] In 1837 he entered a ten-key flute in the Massachusetts Charitable Mechanics' Association fair in Boston and won another silver medal. It is entirely possible that the ten-key flute described below is the instrument exhibited in Boston in 1837.

In 1837 Christman moved a few doors up the street from 398 to 404 Pearl Street. Lodge records indicate that this change in address occurred after March 20 and before December 4, 1837,[19] at the height of the financial panic of 1837.[20] The timing of this move suggests that it may have been a consolidation because of the difficult economic times. It would be several years before business recovered and Christman again exhibited instruments in the Boston and New York fairs.

The 1843 to 1845 directories list Christman as "importer," suggesting a retail operation where he began to handle imported goods as well as his own. The entries of the following years, in which his field of activity is identified as musical instruments, also suggest a broader retail business.

Through the 1840s there is evidence in his exhibits of increasing success. His selection as judge for the 1851 American Institute of the City of New York fair recognizes his leadership among New York musical instrument businessmen. Christman's 1853 exhibits at the Crystal Palace and at the American Institute fair were highlights of his career, showing his most advanced flutes, keyed bugles, and, for the first time, valved brass instruments.

The New York city directories reveal the opening of a second store on Broadway in 1852; in addition, New Orleans directories indicate that Christman's son, Benjamin, opened a music store in that city, initially under his own name but by 1857 trading as C. G. Christman & Son. The reasons for Benjamin's move to the south are not known.

18. *Journal of the American Institute of the City of New York* 1, no. 2 (November 1835), 79.

19. Archival records of New York City German Union Lodge 322: letter from Christman dated March 20, A. L. 5837 [i.e., 1837] with the 398 Pearl Street address; list of return of dues of German Union Lodge No. 322 held in the City of New York from June 4th to December 4th, A. L. 5837 [1837] listing Christman at 404 Pearl Street.

20. Burrows and Wallace, 439, 437.

A New York State census of 1855 shows that "Christman owned $2,000 of real capital and $17,500 [$1,750?] worth of tools. He had in stock $200 of brass, $200 of silver, $300 of wood and $500 of ivory. His shop employed four men who were paid $40 a month and annually produced musical instruments worth $10,000." For comparison, in the same census Alfred G. Badger, soon to become New York's foremost flute maker, "owned no real capital and had only $500 worth of tools. His shop employed two men and one boy at monthly wages of $65. That year, using $200 of wood and $800 of silver, Badger produced $3,000 worth of flutes."[21]

For unknown reasons, Christman's Broadway store lasted only about a year, and soon afterward, in 1855, he moved his Pearl Street shop across the street, from number 404 to 391. The significance of these changes is not known, but they may have been related to Christman's lack of success with his advanced flutes, and to another decline in the U.S. economy. Both the New Orleans and New York operations were closed in 1858. Whether this was because of financial problems related to the economic downturn at that time, uncertainties leading to the Civil War, health problems, or normal retirement (Christman was then fifty-nine) is not known. Benjamin Christman is not heard of again, but his father appears to have continued some making and dealing from his home in Brooklyn until his death in 1884.

Flutes

During the middle decades of the nineteenth century, three kinds of flutes competed for the favor of New York flutists: the simple system flute with from one to eight or more keys; the Boehm flute, invented by Theobald Boehm in 1832 and improved in 1847; and the diatonic flute, invented by Abel Siccama in 1842. The diatonic flute was an attempt to improve the intonation and sound of the simple system instrument without the necessity of drastic fingering changes; the Boehm flute is, of course, the system used today.

Examples of simple system flutes, some having ten or more keys, were exhibited by many makers in several cities throughout this period. Both Boehm and diatonic flutes were exhibited at New York mechanics' fairs

21. Groce, 30 (Christman) and 7 (Badger).

during the period from 1844 to 1857. They were seldom mentioned in the mechanics' fairs in other cities, however, the only instance currently known being a diatonic flute entered in Boston's Massachusetts Charitable Mechanics' Association exhibit of 1850 by Chavrier Peloubet.[22]

W. J. Davis is said by Alfred G. Badger to have examined, and predicted success for, a Boehm flute brought to this country by a tourist in the early 1840s.[23] Davis, however, was unsuccessful in attempting to manufacture them. James D. Larrabee exhibited the first Boehm flute made in the United States at the American Institute of the City of New York (A.I.N.Y.) fair in 1844,[24] and published a newspaper notice about it early in 1845.[25] Alfred G. Badger purchased Larrabee's shop after his death in 1846[26] and exhibited two Boehm flutes at the A.I.N.Y. fair later that year.[27] William Hall & Son followed in 1849,[28] Christman in 1853, and William Rönnberg in 1857.[29]

William Hall & Son exhibited the first diatonic flute in the A.I.N.Y. fair of 1849,[30] followed by Christman and Hugh Cottier in 1850[31] and Badger in 1852.[32] As noted above, Chavrier Peloubet exhibited a diatonic flute at the 1850 Massachusetts Charitable Mechanics' Association exhibit in Boston.[33]

By 1857 the diatonic flute had largely disappeared. Simple system flutes continued to be made mostly for those whose musical activities

22. *Sixth Massachusetts Charitable Mechanics' Association Catalogue* (Boston: Henry Prentiss, 1850), 132.

23. Alfred G. Badger, *An Illustrated History of the Flute* (New York: Firth, Pond & Co., 1853), iii.

24. Groce, 94.

25. *Broadway Journal*, vol. 1, no. 17 (April 26, 1845), 27.

26. Groce, 95.

27. *Catalogue Containing a Correct List of Every Article Exhibiting at the Nineteenth Annual Fair of the American Institute of the City of New York, 1846* (N.p., n.d.), 10, exhibit item 463.

28. *Eighth Annual Report of the American Institute of the City of New York, made to the Legislature, February 26, 1850* (Albany: Charles Van Benthuysen, Public Printer, 1850), 69.

29. *Transactions of the American Institute of the City of New-York, 1853* (Albany: Charles Van Benthuysen, 1854), 550 (Christman); *Transactions . . . , 1858*, 96 (Rönnberg).

30. *Eighth Annual Report . . . , 1850*, 69.

31. "List of Premiums Awarded by the Managers of the Twenty-third Annual Fair of the American Institute of the City of New York, October, 1850," in *Transactions of the American Institute of the City of New-York, for the Year 1850* (Albany: Charles Van Benthuysen, 1851), 22.

32. *Transactions . . . , 1852*, 494.

33. *Sixth Massachusetts Charitable Mechanics' Association Catalogue*, 132.

were less demanding, while the Boehm flute had found wide acceptance among almost all serious and accomplished flutists, both professional and amateur. Although Christman exhibited all three types, examples of his Boehm and diatonic flutes have not been found.

Most surviving Christman flutes are straight-sided, having no decorative or reinforcing enlargements at the joints except the turning in which the D-sharp key is mounted. They range in complexity from one to ten keys, are made mostly of boxwood or rosewood, and may have metal-lined heads and adjustable screw stoppers. Keys are often of German silver, and ferrules or reinforcing rings may be German silver or ivory. Figures 1 and 2 show typical Christman flutes.

The most unusual innovation found on an instrument signed by Christman is that on a flute dating from the 1829–37 period, now owned by William Greeley and shown in figure 3. Figure 3b is a detail of this instrument showing a rack-and-pinion tuning device built into the barrel section that allows the player to tune the flute by twisting a small key. Unfortunately, the rack is missing, but the intended function is clear. Screw holes are visible in the nearest ferrule, where the missing rack was probably attached. To my knowledge only three examples of similar tuning devices are found on woodwinds in American public collections, none of which match the Christman device.[34] A search of English patents turned up only a more complex system patented by Rudall & Rose in 1832 (no. 6338). This system adjusted the tuning by turning the end cap, which caused a double screw mechanism inside the head to move the tuning slide and also to adjust the cork position.

The instrument is probably of rosewood and has nine silver keys with very deep, almost hemispheric, dome-shaped hole covers or flaps. Touchpieces are also distinctive, resembling golf balls on tees (see fig. 3d). The circular end resembling the golf ball (8 mm in diameter) is

34. The Dayton C. Miller collection at the Library of Congress includes a flute (1230) by William Card (fl. London, 1825–76) with a rack-and-pinion head joint tuning mechanism. It is a basic nine-key flute like Greeley's Christman, with the addition of two finger rings. The inscription is "CARD'S PATENT SYSTEM. CARD & CO. LONDON," and the large adjustment wheel is engraved "CARD'S MELODION." The Miller collection also has a cylindrical Boehm/München/Rudall & Rose/Patentees flute (1236) with a clamp-on rack-and-pinion slide adjuster using a body joint ferrule as a lever. The flute must have been made after 1847, but the clamp-on tuning mechanism may have been an earlier design by Rudall & Rose (fl. London, 1821–52). Finally, a bassoon at America's Shrine to Music Museum (2418) by Jean Nicholas Savary (fl. Paris, 1823–53) has a wing-joint tuning device consisting of a toothed brass rod and screw to control the extension of the slide.

Figure 1. Four-key flute, boxwood, ivory ferrules and brass keys, "C. G. Christman / 404 / Pearl St. / New York," unicorn. Photo used with permission of the Avrahm Galper Collection, Toronto, Canada, photography by Mark Charette.

a. Flute

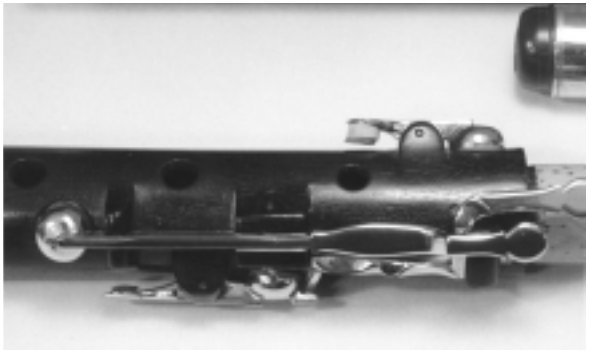
b. Detail showing the pewter-plug foot keys.

Figure 2. Eight-key flute, rosewood, silver ferrules and keys, "C. G. Christman / 398 / Pearl St. / New York." Eliason collection, Lyme, N.H.

a. Flute

b. Detail showing the rack-and-pinion tuning device. Photo by Arden Postma.

c. Detail of extended foot



d. Detail of keys

Figure 3. Nine-key flute, rosewood, silver ferrules and keys, "C. G. Christman / 398 / Pearl St. / New York." Photo used with permission of William Greeley, Midland, Mich.

interrupted by nicks on either side defining the beginning of the shank (5 mm wide), which looks very much like the top of a golf tee. The B-flat key has touchpieces for either the left thumb or the right forefinger, and the foot extends to B as shown in figure 3c, a feature more common on German and Austrian flutes.[35] Unlike most other Christman flutes, this instrument has reinforcing turnings at the lower end of the barrel and at the upper end of the combined right hand and foot section. The keys are of German silver in a very distinctive design, and some key shanks are decorated with a scalloped pattern (see fig. 3d). Wide German-silver ferrules are decorated with knurled borders, and the same knurling is used to indicate gradations on the tuning slide. The third and fifth finger holes are smaller than on other Christman flutes. The "Patent" in the inscription of this instrument may refer to an as yet undiscovered patent by Christman or, more likely, the patent of another maker. This flute bears little resemblance to other flutes signed by Christman, and may well have been made by another maker, although it is also unlike the work of any other maker known to me.

Another unique instrument signed by Christman and dating from the 1829–1837 period is a ten-key flute in the collection of Douglas Koeppe, Sr., shown in figure 4. It is made of rosewood and has an ivory head with a wide band of silver at the embouchure hole. Head and barrel are lined with German silver; the rosewood end cap is inlaid with mother of pearl and has a screw-adjustable stopper with a graduated German-silver indicator. The keys are mounted in blocks lined with German-silver saddles, eight of them with dome-shaped flaps and two with pewter plugs. Interestingly, as shown in figure 4c, each key has a double spring consisting of a blue steel spring attached to the body of the instrument as well as the usual spring attached to the key.[36] The two keys in addition to the customary eight are a short F-sharp key on the right-hand joint and a long trill key on the left-hand joint. The touch of the trill key overlaps and presses the C key as well and seems to produce B/C-sharp and C-sharp/D trills. The B-flat key on the left-hand joint has an extra touchpiece for the right forefinger. The C and C-sharp plug keys have single touchpiece rollers, and the short F and F-sharp keys each have double rollers, one on each side of the touchpiece (see fig. 4b). The double

35. Anthony Baines, *European and American Musical Instruments* (New York: Viking Press, 1966), 89.

36. Rudall & Rose and Bilton flutes in the collection of David Smith (Auckland, New Zealand) have a similar arrangement.

a. Flute

b. Detail of parts

c. Detail showing double springs

Figure 4. Ten-key flute, rosewood, silver ferrules and keys, "C. G. Christman / 398 / Pearl St. / New-York / Patent." Photo used with permission of Douglas Koeppe, Sr., League City, Tex.

roller idea is very unusual, possibly unique. The "Patent" in the inscription of this instrument may refer to an as yet undiscovered Christman patent or to the patent of another maker.

Unlike the Greeley nine-key flute, this instrument shows many similarities to other flutes bearing Christman's stamp. The body is straight-sided, without any thicker turnings at the joints, and the shape of the keys is similar, especially the gourd-shaped D-sharp key and long F key. The pewter plug keys also match those on two other Christman-stamped flutes. The excellent materials and workmanship of this instrument suggest that it was made for exhibition, and it may well have been the ten-key flute awarded a silver medal at the 1837 Massachusetts Charitable Mechanics' Association fair in Boston.

An eight-key Christman flute belonging to John Bowman also deserves mention. It bears the 404 Pearl Street address, thus dating it from the 1837–54 period, and is made of reddish cocus with silver keys, trim, and embouchure band. The cork screw is turned wood with a silver-covered tip. Six keys are dome-shaped and the lower C and C-sharp keys are plug-type. The ferrules or rings at the end of each joint are narrow like those on the Koeppe instrument, but are not raised as much and have decorative grooves on each side. The instrument is straight-sided, like most Christman flutes. An oval wooden case with the instrument appears to be original and includes a label identifying a previous owner as "Rev. A. S. Walker, Wellesley Hills, Mass." According to David Shorey, "this beautiful flute shows some very nice stylistic decisions by Christman. It was not a strict copy of anything, but an original design. The little lips on either side of the embouchure band and the fancy silver rings especially set this flute apart."[37]

English pewter plug keys are found on the last two instruments described above, on the flute in my own collection shown in figure 2, and on another from the same period in the Duke University collection (61). All four flutes are probably of rosewood and have silver or German-silver ferrules, metal-lined heads, and eight or more silver or German-silver keys. Metal plug-type keys were patented by Richard Potter in 1785 and used by many makers off and on throughout the nineteenth century.[38] They were not that common in this country during the 1830s and 1840s, however. John Meacham and George Catlin may have been the first American makers to use the idea in the early

37. Private correspondence, February 7, 2001.
38. Baines, 89.

1800s. A boxwood flute preserved at the Smithsonian Institution (77.9) signed "Meacham / Albany" is equipped with a single metal-plug key for D-sharp, and a "Catlin / Philadelphia" flute at Mount Vernon Estates, Virginia, has six plug keys. A few Meacham & Pond flutes dating from 1828–32 have the more usual C and C-sharp plug keys.[39]

Another unusual instrument is the flute / flageolet signed "C. G. Christman / 404 Pearl St. / New York / Patent" found in the collection of Old Sturbridge Village, Mass. (10.17.31; see fig. 5). Its upper portion has the usual flageolet features, including a slender ivory mouthpiece, bulbous sponge chamber, and fixed air duct, but for the rest of its length it resembles a flute. There are six finger holes and six keys. The finger holes and four of the keys are exactly like those on a four-key flute. In addition, there is a register key near the top of the instrument, which raises the pitch a fourth, and an open key at the bottom, probably for low F-sharp. The proportions are those of an F flute, about 250 mm from first hole to tip, sounding G with all finger holes covered. William Bainbridge (fl. London, c. 1800–c. 1830) was the leading designer and maker of English flageolets in the early nineteenth century, but this does not appear to be one of his designs.[40] The flute / flageolet he patented in 1807 was simply a flageolet built to be played in the transverse position, whereas Christman's idea seems to have been a flute built to be played in the vertical position with the simplified embouchure and tone production of the flageolet.

On December 25, 1849 (Christmas was not a legal holiday in the United States until 1856), Christman was granted U.S. Patent 6,968 for flute-key and tone-hole layout. He writes:

> What I claim as my invention and improvement and desire to secure by Letters Patent is:
>
> 1. Removing the third and sixth holes from their ordinary place on the old flute to a point farther down, and sounding the notes produced by the said holes, by keys operated at the natural fingering place, thereby producing with ease a quality of tone, now unattainable, or attained only by great skill, and then with uncertainty.[41]

39. Other flutes by Meacham & Pond with metal plug keys are found at the Henry Ford Museum (78.64) and the Dayton C. Miller Collection at the Library of Congress (1162).

40. William Waterhouse, "The Double Flageolet—made in England," *The Galpin Society Journal* 52 (1999): 172–82.

41. This appears to be the same idea used by Abel Siccama on his "Diatonic" flute of 1842.

Figure 5. Six-key flute/flageolet, stained boxwood, ivory beak and ferrules, brass keys, "C. G. Christman/404/Pearl St./New York/Patent." Photo used with permission of Old Sturbridge Village, Mass.

2. I claim producing the true sharp and flat keys by means of the double holes and operating keys, as described herein.[42]

According to the text and drawings, Christman drilled separate side-by-side holes of slightly different size and placement for the D-sharp, G-sharp, and B-flat keys. Double keys were used with shanks and touch pieces arranged so that one or both holes could be opened. By this means separate notes for D-sharp and E-flat, G-sharp and A-flat, or A-sharp and B-flat could be produced.[43]

No instruments by Christman exhibiting either of these improvements have been found. Seven of his instruments, including the four-key flute displayed in America's Shrine to Music Collection (2735), are marked "Patent" but do not show any of the patented features. Two of them bear address inscriptions of 398 Pearl Street dating them from the 1829–37 period before this patent was issued, and may refer to an earlier patent or to patents by other makers. A search of the patents reconstructed after the Patent Office fire of 1836, as well as the Patent Office reports to Congress from 1823 to 1837, did not turn up any earlier patent by Christman.

Clarinets and Bassoon

In this country during Christman's career there does not seem to have been the competition for advancement of keywork for clarinets that there was for flutes. Simple system five-key instruments were made by many makers, but only a few made ten- to thirteen-key clarinets. Among Christman's contemporaries, William Whiteley, Samuel Graves, and the Litchfield, Connecticut shop of Hopkins/Camp/Firth, Hall, & Pond are known to have made twelve- and thirteen-key clarinets.

Five-key, ten-key, and thirteen-key clarinets with Christman's stamp survive. A five-key instrument in B-flat at the Metropolitan Museum of Art (1995.398.2) dating from 1837–54 is shown in figure 6. It is made of stained boxwood with ivory rings and brass keys, and has a concave shaped barrel with a very wide ivory ring. The barrel is not designed for the long tenon mouthpiece as found on many American clarinets of the time. A very similar five-key clarinet is in the Koeppe collection.

42. U.S. Patent Office Specification of Letters Patent No. 6,968, dated December 25, 1849, p. 2, lines 10–23.

43. This was not a new idea either, having been tried by Johann Joachim Quantz in 1726, at least for D-sharp and E-flat: see Philip Bate, *The Flute* (London: Ernest Benn, 1969), 93.

The ten-key clarinet at the University of Michigan Stearns Collection (621), shown in figure 7, is unusual in being in the key of A (about 68 cm in total length). It is signed "NEW YORK" without any address and probably dates from the last years of Christman's work. Clarinets in C were most common at the time, B-flat instruments somewhat less so, but clarinets in A are seldom encountered. This clarinet is made of stained boxwood with a concave barrel and a wide ivory ring similar to the two five-key instruments. The barrel on this instrument, however, is designed for a long tenon mouthpiece, having an upper socket that goes all the way through to the larger lower socket. The turning left for the F hole and G-sharp key is similar to the five-key instruments, being cut off abruptly at the bottom. The G-sharp key shank is also similarly shaped.

The thirteen-key clarinet belonging to Kevin Boles, shown in figure 8, is a more advanced design than the others (unfortunately its mouthpiece and barrel are missing). It also probably dates from the last few years of Christman's work. Keys, as shown in figure 8b, are mounted in pillars, and each shank has a circular tip at the key end, through which a rivet attaches the dome-shaped flap. This key design is very similar to that patented by James Wood in England early in the century and illustrated by a photograph of a Goulding, London, clarinet (933) in the catalog of the Edinburgh University Collection.[44] Christman's rivet heads are smaller, though, and almost flush with the circular shank end. There is very little in the way of workmanship to connect this clarinet with the others stamped by Christman, and it may well have been made by another maker. Again, however, as in the instance of the nine-key flute, there is no other maker known to me whose workmanship does match this instrument.

The only known Christman bassoon (Henry Ford Museum 81.88.1), signed "C. G. Christman / New York," is shown in figure 9 and seems to have some central European origin or influence. It has five keys with eight-sided key flaps similar to German bassoons, and is unusual in having no G-sharp key. Herbert Heyde suggests that the unusual bell turnings and the flat side where the keys controlling lower pitches are mounted resemble Austrian or Bohemian instruments of that period.[45] The bocal is not original.

44. Arnold Myers, ed., *Historic Musical Instruments in the Edinburgh University Collection* (Edinburgh: Edinburgh University Collection of Historic Musical Instruments, 1990), 1:104.

45. Private communication, April 5, 2000.

Figure 6. Five-key clarinet in B-flat, stained boxwood, ivory ferrules and brass keys, "C. G. Christman / 404 / Pearl St. / New York." Photo used with permission of the Metropolitan Museum of Art, New York, N.Y.

Figure 7. Ten-key clarinet in A, boxwood, ivory ferrules and brass keys, "C. G. Christman / New York." Photo courtesy of the University of Michigan Stearns Collection, Ann Arbor, Mich.

a. Clarinet

b. Detail of keys

Figure 8. Thirteen-key clarinet in B-flat, boxwood, ivory ferrules and brass keys, "C. G. Christman / New York." Photo courtesy of Kevin Boles, San Mateo, Calif.

Unicorn Device

Of the thirty-four Christman woodwind instruments found so far, six flutes, a flute / flageolet, and two clarinets have a unicorn stamped above the inscription, including two of the flutes marked "Patent." Because of this, collectors have thought that these instruments—all of which are stamped with the 404 Pearl Street address, where Christman worked from 1837 to 1854—were imported from England, where a unicorn mark was used by several makers. However, the only active London makers using a unicorn during this period were Richard John and John

Figure 9. Five-key bassoon, maple, brass ferrules and keys, "C. G. Christman / New York." From the collections of Henry Ford Museum & Greenfield Village, Dearborn, Mich.

Bilton at 93 Westminster Bridge Road, London; and Robert Wolf and Wolf & Figg at 79 Cornhill, 45 Moorgate Street, and 20 St. Martins le Grand, London.[46] I have examined photographs of the unicorn stamps on Bilton flutes in the collections of Terry McGee (Holder, Australia), David Smith (Auckland, New Zealand), and the Library of Congress (DCM 594 and 713), on a Wolf & Figg flute at Yale University (3226.82), and on a Wolf flute at the Library of Congress (DCM 952) and they do not match those on known Christman instruments. The Christman unicorn stamp is shown in figure 10, the Bilton in figure 11, Wolf in figure 12, and Wolf & Figg in figure 13.

The body styles, details of turnings, and key design of the Bilton, Wolf, and Wolf & Figg flutes are also quite different from Christman flutes bearing the unicorn stamp. The English flutes have graceful turnings to reinforce each joint, whereas Christman's unicorn flutes do not. The key-mount turning for the D-sharp key on the English flutes is tapered, getting larger toward the foot, then cut off abruptly; on Christman flutes this turning is more rounded and less abruptly cut off. On two examples it is symmetrical, with no cut-off at all, and has a decorative ridge above (see fig. 1), while on others only a block is left for the key mount. The Bilton, Wolf, and Wolf & Figg flutes have square key flaps with decorative corner grooves and graceful oval touch pieces. Of the five keyed flutes by Christman that have unicorns and keys and were available for examination, two have similar square key flaps and the others dome-shaped key flaps. Three of the five have a distinctive gourd-shaped D-sharp touch piece quite different from those on the English flutes (see figs. 2b and 4b). On the other two this key is similar to those on the English flutes, but wider.

The unicorn marks on the Robert Wolf & Co. clarinet in the Edinburgh University collection (104) and the Christman clarinet at the Metropolitan Museum of Art (1995.398.2) are also quite different. Although these instruments are more similar to each other than are the flutes, they differ in the shape of the barrel, shape and width of ivory rings, shape of block key mounts, and design of the turning left for the F hole and G-sharp key mount.

While these comparisons involve only a few instruments and cannot be conclusive, there is no clear evidence of any relationship between

46. William Waterhouse, *The New Langwill Index* (London: Tony Bingham, 1993), 32 (Bilton), and 434 (Wolf and Wolf & Figg).

Figure 10. Christman unicorn stamp. Photo used with permission of Timothy Holmes, Lincoln Park, Mich.

Figure 11. Bilton unicorn stamp. Photo used with permission of David Smith, Auckland, New Zealand.

Figure 12. Robert Wolf unicorn stamp. Photo used with permission of the Edinburgh University Collection, Edinburgh, Scotland.

Figure 13. Wolf & Figg unicorn stamp. Photo used with permission of the Yale University Collection of Musical Instruments, New Haven, Conn.

Christman instruments bearing a unicorn stamp and those by Bilton, Wolf, or Wolf & Figg. It seems highly unlikely that the English makers would change their unicorn marks and the style of their instruments for the American market, especially for a small firm like Christman's. Perhaps a workman in Christman's shop came from an English shop where the unicorn was used, and continued to use it in a slightly different form to distinguish his work.

Brasses

Brass instruments were undergoing even more rapid development than woodwinds during Christman's career. The military bugle was raised to the status of a band solo instrument after 1810 by the addition of woodwind-like keys. Natural trumpets and horns were transformed by the development of the valve beginning in 1814 or 1815. The first keyed bugles and valved brasses made in the United States appear to be those made by Nathan Adams between 1824 and 1835.[47] Henry Sibley introduced the small E-flat keyed bugle about 1835,[48] and Samuel Graves, with the help of English maker James Keat, began making keyed and valved brasses in quantity in the late 1830s.[49] After the Distin family quartet toured the United States in 1849 playing a quartet of Saxhorns (matching valved brasses from soprano to bass), valved instruments were soon found in most of the popular bands of the period.

Most of the exhibits of Christman instruments at mechanics' fairs included brass as well as woodwind instruments (see table 3). His exhibits of "one harmonic pocket bugle" in 1828 and trumpets and post horns in 1835 are early in date for this country, but claim no new advances. Through the 1840s, the brasses he exhibited did not yet have keys or valves. In 1853, however, Christman showed a "Royal Kent bugle" in Boston and "saxe-horns, bugles, [and a] tuba" in New York. These instruments clearly indicate his adoption or import of the new ideas.

Two Christman E-flat keyed bugles, one B-flat keyed bugle, and two slide trombones survive, but so far none of his Saxhorns have been found. Since E-flat keyed bugles were not as common as B-flat models in Europe or England, Christman is more likely to have had them made in his own shop or by other American makers. Details of their construc-

47. Robert E. Eliason, *Keyed Bugles in the United States* (Washington, D. C.: Smithsonian Institution Press, 1972), 7; and Eliason, "Early American Valves for Brass Instruments," *The Galpin Society Journal* 23 (1970): 86.

48. Allen Dodworth, "Brass Bands," *The Message Bird*, New York, June 15, 1850, 361.

49. Robert E. Eliason, *Graves & Company* (Dearborn, Mich.: Greenfield Village & Henry Ford Museum, 1975), 8.

tion, such as the key mounts, are different from any known American instruments, yet the overall shape of the instruments is distinctly American. An E-flat keyed bugle belonging to Mark Elrod, shown in figure 14, is signed "Manufactured / by / C. G. Christman / 404 / Pearl St. / New York," suggesting that it was made either in his shop or to his specifications during the period 1837–1854. A B-flat keyed bugle owned by Vintage Instruments (Philadelphia) is quite different in workmanship, having box-shaped key mounts, flat disc-shaped key flaps, and distinctive touchpiece design. It has six keys and appears to be English in design and from much earlier than the two E-flat keyed bugles. The trombones are also quite different from each other: the one from the Elrod collection, shown in figure 15, has a loop in the bell section, a water key, and a rolled bell edge, while the one from the Moravian Museum has no loop, no water key, a bell garland, and different details on its ferrules and joints. Both have straight tubular stays. Based on their workmanship, only the two E-flat keyed bugles could be said to have come from the same shop. Although Christman may briefly have hired workmen to make brasses at the peak of his success, most of the time he probably sold brasses that he had imported or obtained from other makers.

Publishing

Christman also tried his hand at publishing music. More than 120 sheet music titles published by the firm have been found, dating from 1837 to 1857. They include art music, music for dancing, popular songs, band quicksteps and marches, arrangements for flute and guitar, dialect minstrel songs, and instrument instruction books. Among them are Dan Emmett's *Old Dan Tucker*, two quicksteps by the well-known New York bandmaster Claudio Grafulla,[50] and at least a dozen compositions by Anthony Philip Heinrich, a prominent German-American composer.[51] The cover of *Shelton's Quick Step,* published by Christman in 1852 (see fig. 16), shows James Shelton, Esq., with his unusual keyed and valved over-the-shoulder cornet.

50. Middle Tennessee State University Center for Popular Music, http://popmusic.mtsu.edu/.

51. These works are listed in the following on-line library catalogs: (1) Lester S. Levy Collection of Sheet Music, Johns Hopkins University, Milton S. Eisenhower Library, http://levysheetmusic.mse.jhu.edu (of nine Heinrich titles in this collection, seven are found on an advertisement for Christman's publications on the back of the music sheet "I Would I Were A Fairy . . ." composed by Augusta Browne, lyrics by R. F. Houseman); (2) Mills Music Library, University of Wisconsin-Madison, Americana Collection, http://www.library.wisc.edu/elib.music.1/americana.search.html (3 Heinrich titles); and Library of Congress Online Catalog http://catalog.loc.gov (1 Heinrich title).

Figure 14. Nine-key bugle, copper, German silver keys and trim, "Manufactured / by / C. G. Christman / 404 / Pearl St. / New York." Photo used with permission of Mark Elrod, Germantown, Md.

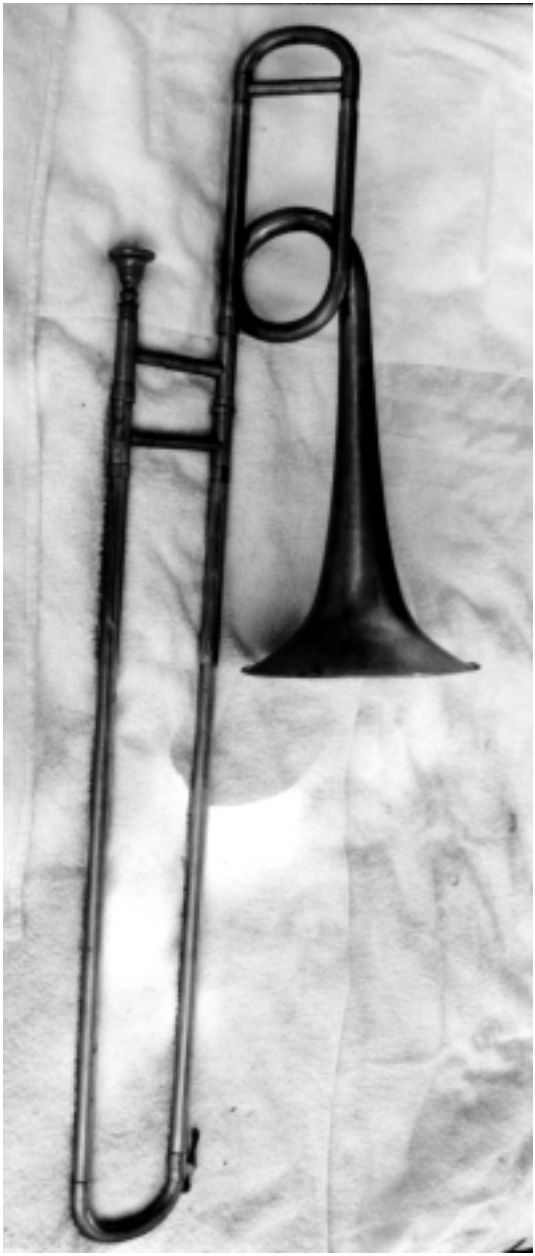


Figure 15. Trombone, brass, "C. G. Christman / New York." Photo used with permission of Mark Elrod, Germantown, Md.

Figure 16. Sheet music cover, "Shelton's Quick Step / Composed & dedicated to / James Shelton, Esq. / by / Maximilian Zorer. / New York / C. G. Christman, 605 Broadway / C. G. Christman & Son, 37 Canal Street / New Orleans." Photo used with permission of the Newberry Library, Chicago, Ill.

Summary

Christman was one of the earliest American flute makers. As shown in table 4, he was preceded in New York City by Louis Alexander de Peloubet (no surviving instruments), Edward Riley, John Firth, and William Hall. Elsewhere, only Jacob Anthony, George Catlin, J. & H. Meacham, William Whiteley, Heinrich C. Eisenbrandt, and Bacon & Hart began business before him. Christman was active during a major transition in flute making. Although he attempted some improvements himself and exhibited early models of diatonic and Boehm flutes, he was evidently not successful in marketing these designs.

Christman's shop was also one of the earliest in this country to offer brass instruments (see table 4). John Balthius Dash advertised French horns in New York in 1765, but he was mainly an iron, tin, and coppersmith. Christman's exhibit of trumpets and post horns in 1835 coincided with the formation of the nation's first brass bands.

Christman's success may have been adversely affected by difficult economic conditions. William Greeley, a Christman flute owner, has pointed out to me that major changes in Christman's business (his move from 398 to 404 Pearl Street in April or May of 1837 and his retirement in 1858) coincide with serious economic downturns. Of Christman's surviving instruments most of the more advanced flutes, those with eight or more keys, are from the period when he was at 398 Pearl (1829–37). From the time at 404 Pearl (1837–54), when he was exhibiting sixteen-key, diatonic, and Boehm flutes at mechanics' exhibits, mostly one- and four-key flutes survive. He may have been offering the more advanced instruments in the later years, but evidently the cheaper models were more popular.

Judges at mechanics' exhibits during his career recognized his craftsmanship with at least six silver medals and two diplomas. At the 1841 Massachusetts Charitable Mechanics' Association fair they also commented that two flutes he exhibited were better than those of Jacob Pfaff (Philadelphia), but not as good as those of W. J. Davis (New York), thus placing him among two other fine flute makers of his day.[52] Christman used more expensive materials, including a significant amount of

52. Pfaff was a German woodwind maker who flourished briefly in Philadelphia 1839–1842. He often entered flutes in mechanics' fairs, winning several premiums. Davis was primarily a flutist and only periodically involved in flute making. He received a silver medal for five flutes he exhibited at the 1841 Massachusetts Charitable Mechanics' fair, and was involved in the introduction of the Boehm flute shortly thereafter.

Table 4. C. G. Christman's predecessors and contemporaries in the United States*

	Woodwinds	
Jacob Anthony Sr.	Philadelphia	1764–1804
Jacob Anthony Jr.	Philadelphia	1793–1811
George Catlin	Hartford; Philadelphia	1799–1852
Louis Alexander de Peloubet	New York, Athens, Albany, Hudson, N.Y.	1803–1812
J. & H. Meacham	Albany	1810–1832
William Whiteley	Utica, N.Y.	1810–1854
Heinrich C. Eisenbrandt	New York, Philadelphia & Baltimore	1811–1849
Bacon & Hart	Philadelphia	1813–1833
Edward Riley	New York	1820–1831
Firth & Hall	New York	1821–1841
Charles G. Christman	**New York**	**1823–1857**
Benjamin Clemens	Philadelphia	1823–1854
Allen R. & Edward Jollie	New York	1823–1877
Samuel Graves	Winchester, N.H.	1824–1850
Hopkins/Camp	Litchfield, Conn.	1829–1841
Chabrier Peloubet	New York; Bloomfield, N.J.	1829–1881
Walter Crosby	Boston	1830–1872
Henry Prentiss	Boston	1830–1859
Bacon & Weygandt	Philadelphia	1833–1839
Thomas Longhurst	New York; Brooklyn	1833–c. 1855
Firth, Hall & Pond	New York	1833–1847
William Rönnberg	New York	1834–1889
Alfred G. Badger	Buffalo; Newark; New York	1834–1892
Theobald P. Monzani	New York	1835–1866
Edward Baack	New York	1837–1871
Jacob Pfaff	Philadelphia	1839–1842
W. J. Davis	New York	1839–1841
T. J. Weygandt	Philadelphia	1839–1865
Hugh Cottier	New York; Brooklyn; Buffalo	1840–1860
John Pfaff	Baltimore; Philadelphia	1842–1888
James D. Larrabee	New York	1844–1846
William Hall & Son	New York	1847–1874
	Brasses	
John Balthius Dash	New York	1765–1804
Charles G. Christman	**New York**	**1823–1857**
Nathan Adams	New York; Lowell, Mass.	1824–1835
Graves & Co.	Winchester, N.H.; Boston	1824–1870
Henry Prentiss	Boston	1830–1859
Firth, Hall & Pond	New York	1833–1847

Henry Sibley	Boston	1835–1846
John C. Rosenbeck	New York	1838–1839
J. Lathrop Allen	Sturbridge, Mass.; Norwich, Conn.; Boston; New York	1838–1868
E. G. Wright	Roxbury, Mass.; Boston	1839–1871
Joseph Rohé	New York	1840–1863
Thomas D. Paine	Boston; Woonsocket, R.I.	1841–1857
Isaac Fiske	Worcester, Mass.	1842–1888
Jules Lecocq	New York	1845–1872
Gotfried Martin	New York	1852–1884

*City directory data checked against Nancy Groce, *Musical Instrument Makers of New York* (Stuyvesant, N.Y.: Pendragon Press, 1991) and William Waterhouse, *The New Langwill Index* (London: Tony Bingham, 1993).

rosewood, silver, and German silver, as well as the boxwood and brass more common among his contemporaries. He was one of the first to use the straight-sided design that became typical of mid-nineteenth-century American flutes.

Some of the instruments Christman sold were undoubtedly imported, but there is evidence of quite a bit of manufacturing too. Beyond a doubt he ran a sizable shop that produced a respectable quantity of instruments ($10,000 worth in 1855). The instruments he exhibited, especially the ten-key and sixteen-key flutes for which he received prizes, were certainly made by Christman or in his shop, since otherwise they would have been identified as the work of others in the exhibitions. Similarly, there would have been no reason for George Willig to exhibit instruments in the Franklin Institute fairs as Christman instruments if, in fact, they had been made by someone else. The evidence of his patent also indicates that Christman was an active instrument maker.

At least thirty-nine Christman instruments survive, some of them still being played. Although his activity ceased just as the Boehm flute began to be dominant, his production and exhibits helped to introduce important new technology in flute making to this country. His activities in brass instruments and music publishing, while less important, are also of interest. He was certainly a maker and businessman of better than average ability, who made an early contribution to the development of flute making and the retail music business in the United States.