

*Journal of the
American Musical
Instrument Society*

VOLUME XLIV • 2018



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The Origins of the “Indian” Harmonium: Evidence from the Colonial Press and London Patent Office*

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Whereas Westerners consider the small “box” or “hand” harmonium an exotic musical artifact of India and other South Asian countries, this instrument has long been stigmatized there as an instrument of foreign design and musical ungainliness.¹ It would be on *Indian* soil, however, that the hand-harmonium technology asserted its performative independence from the ubiquitous “parlor” harmonium that otherwise saturated nineteenth-century European society, at home and abroad.

Understandably, the large, European harmonium found its way—amid crates, trunks, and barrels—to colonial outposts among the well-appointed households of civil servants, military officers, merchants, etc. With an eye toward greater portability, however, European builders began—mid-century—to design, patent, and manufacture smaller instruments that would find particular traction in export markets. First conceived for traveling Europeans, playing hymns and parlor songs, these compact instruments provided the model, ultimately, for the indigenous “Indian” harmonium.

This investigation explores the unfolding history of the Indian “hand” harmonium through the eyes of the colonial press of the 1870s and 1880s. As a major consumable durable of the age, the harmonium is prominently featured in commercial advertisements of the time. These ads, appearing almost daily in the newspapers of Bombay and Calcutta,² document the dynamic market for such instruments, the cutthroat competition among dealers, and the often-ephemeral nature of new designs

*The author gratefully acknowledges support for this research from the American Institute of Indian Studies and the National Endowment for the Humanities.

1. Matt Rahim, “That Ban(e) of Indian Music: Hearing Politics in the Harmonium,” *The Journal of Asian Studies* 70 no. 3 (August 2011): 657–82. Amanda J. Weidman insightfully compares the harmonium’s reception to that of another European import—the violin—in *Singing the Classical, Voicing the Modern: The Postcolonial Politics of Music in South India* (Durham and London: Duke University Press, 2006), 46–49.

2. This investigation has drawn primarily from the *Times of India* of Bombay and the *Indian Mirror* of Calcutta.

and novelty "improvements." This article also turns to evidence from the Patent Office. Whereas documentation from nineteenth-century Indian patents is fragmentary at best, many developments toward miniaturization and portability can be traced back to existing European patents.

The Early History of the Harmonium

To the Western reader, the term harmonium will most likely conjure up images of the common "pump organ," a ubiquitous musical furnishing in European and American parlors (and many churches) of the nineteenth and early twentieth centuries. This household instrument, rivaled only by the piano in popularity (some builders combined both in the same instrument!), is best classified generically by the name "reed organ," although it was given a variety of labels in the music trade³ depending on the manufacturer and its various patented novelties.

The instrument emerged in Europe in the early nineteenth century from a flurry of experimental activity with free reeds. Some general consensus on the basic principles of the instrument (an upright, compact case, resonator-less free reeds, activated by a keyboard, and winded with foot-operated bellows⁴) was reached in the 1820s and 30s. Important individuals involved in these evolutionary experiments include Aristide Cavallé-Coll and Alphonse Mustel (Poikilorgue), François Debain and Jacob Alexandre (Harmonium) in France, and Anton Haekl (Physharmonika) and J. L. Schiedmayer (Euphonion) in Austria/Germany. For his 1840 patent of a single-bellows reed organ, Debain coined the term "harmonium," and this name would become widely used in the industry thereafter. Manufacturing of reed organs accelerated exponentially in the 1840s, as did the variety of sizes, models, and features.

It is less well known today, but reed organs were, from the very beginning, available in a variety of sizes and configurations. While larger instruments, for semi-permanent installation in parlors and churches, have survived in greater quantity and better condition today, small instruments, designed for portability, were frequently being developed and in production (fig. 1). Many patents dealt, not with the musical instruments themselves, but with novel ways of dismantling them or folding

3. Cabinet Organ, Cottage Organ, Melodeon, Orgue expressif, Organette, Seraphine, etc.

4. American builders preferred a winding system based on suction; the Europeans most commonly preferred pressure.



FIGURE 1. Two harmoniums, one collapsible and one small upright, in the present-day Dwarkin workshop, Calcutta. Author's photo.

them up to fit into a travel chest. (One instrument was even designed, when compacted, to look like a large family bible.⁵) These designs typi-

5. Arthur W. J. G. Ord-Hume, *Harmonium: The History of the Reed Organ and Its Makers* (New York: Vest Press, 1986), 36.

cally dealt with the issues of size and bellows placement. In some situations, it was merely a case of simple, detachable foot treadles connecting to the bellows in the instrument. If the bellows were built into the treadles themselves, then special stands were invented to channel air upward into the instrument. A variety of such configurations existed to allow instruments to be used on the lap, on a tabletop, or on their own convenient stand. Such instruments found special favor wherever portability was valued; they were used in the military, as well as by missionaries, itinerant teachers, and other travelers.

Imported "Parlor" Harmoniums

Soon after the emergence of the harmonium as a popular domestic instrument in Europe, and as the "Age of Empire" displaced more and more households of soldiers and civil servants to distant corners of the earth, the instrument began its global travels. Either as a secular instrument for the parlor or as a sacred instrument for the mission, the harmonium proved itself a good voyager; it was available in small, table-top versions, but even in its largest sizes, it was considerably lighter than a piano. With no soundboard to worry about, and with metal reeds instead of strings, it certainly kept its tune better. Although it might have suffered from sticking keys, a problem also well-known on the piano, its playing mechanism was much simpler to maintain and repair.

In addition to the instruments arriving with the household effects of wealthier colonials, by the 1860s huge shipments of harmoniums were arriving in India for retail sale. Almost always, this was front-page news, along with the all-important shipping notices, and ads for the accoutrements of a comfortable life in colonial exile: firearms, liquors, laces, and bonnets (fig. 2). In Bombay, Herbert & Co. imports scores of harmoniums in each single shipment, and its inventory "surpasses any single collection in London or elsewhere." The establishment is completely geared up for the harmonium trade. On staff is a maintenance man, trained at the Alexandre factory in Paris, "to render the beautiful workmanship in all Harmoniums secure from the effects of climate and the ordinary circumstances attending their use in India."⁶

In domestic instruments, of course, appearance is of primary importance. The instruments' musical qualities were often mentioned only after details of wood and ornament:

6. *Times of India*, 3 September 1862, 1.

HARMONIUMS EXTRAORDINARY.

HERBERT & Co. have the honor of submitting the following Instruments and their appurtenances for selection: they are made by the most celebrated artists who have gained repute as good mechanists, and can be warranted. No such assortment of these fashionable Instruments has ever been seen in Bombay:—

- No. 1.—OAK CASE with tinted polish, handsomely moulded and pannelled, mounted with Ebony, 16 stops, with all improvements: Percussion, "Voix Celeste," Musette, &c.; the "Knee swell" is a grand addition.....Rs. 950
- No. 2.—ROSEWOOD Do.—A perfect Drawing-room Instrument, possessing all the qualities of every modern musical instrument combined within the space occupied by a lady's parlour desk. This Instrument is played upon daily, and greatly admired for its wonderful diversity of tones.....Rs. 900
- No. 3.—WALNUT WOOD Do.—A superbly finished Harmonium with a double row of keys, full compass, having 22 stops and a separate blowing handle at the back. These Harmoniums are commonly found in the residences of most of the Royal Families and of the Nobility throughout Europe.....Rs. 1200
- No. 4.—ROSEWOOD Do.—A full-tone 14 stop Percussion Harmonium with zinc plate at back, and bottom, made very strong. A fine Instrument. No. 5.—OAKWOOD, POLISHED:—with 15 stops,—double wings for producing the "Swell"—percussion action, &c.: a grand and powerful Instrument and very strongly made;—covered with zinc plate underneath, well adapted for a Church.....Rs. 800
- No. 6.—AN OAKWOOD ORGAN HARMONIUM with ornamental front, fitted with metal pipes like a Church Organ; the stops in this Instrument are well voiced and full in tone; it stands 8 feet high and has ten rows of keys and 16 stops, the upper row of keys produce a very soft and flute-like quality of tone. This Instrument is well adapted for Organ Music, and is worthy the attention of organists.....Rs. 700
- No. 7.—ROSEWOOD DO. DO., very handsome, with two rows of keys producing about a dozen different qualities of sound; the upper row of keys have the new stop "Voix Celeste".....Rs. 650
- No. 8.—DITTO DITTO, precisely as above.....Rs. 650
- No. 9.—ROSEWOOD HARMONIUM, 14 stops, quite plain with full tone, very strongly made. A remarkably cheap Instrument.....Rs. 500
- No. 10.—A "Robt's" best full power ORGAN HARMONIUM, containing imitations of every musical instrument;—the combined sound is equal to a miniature orchestra. It has 15 stops with a "compensation" pedal, and is a most perfect Harmonium of its kind.....Rs. 650
- No. 11.—DITTO DITTO another precisely similar in every respect.....Rs. 650
- No. 12.—OAKWOOD HARMONIUM with a fair complement of stops fitted with Apparatus to perform Music upon the keys, in the usual manner, but without the application of fingers upon them, or the knowledge of Music on the part of the person applying the Apparatus—every kind of Music is prepared ready for playing. Also the Harmonium is available for playing upon in the usual way with the fingers. This affair is a great curiosity in its way, and is very useful where a good player cannot attend. Price without the Machine and Music Apparatus.....Rs. 400

- No. 13.—ANTIPHONEL with Music as referred to in the Apparatus connected with No. 12.....Rs. 280
 - No. 14.—OAKWOOD HARMONIUM, precisely similar to the Instrument described in No. 12.....Rs. 400
 - No. 15 and 16.—Two more precisely similar with SELF-PLAYING ATTACHMENTS.....Rs. 1300
 - No. 17.—MINIMA HARMONIUM.—This elegant and novel Instrument is on an improved model; has double trebles, with three sets of notes throughout, producing as many distinct qualities of tone. It has the Percussion or Pianoforte Hammer Action, comprises five octaves of notes with four octaves of keys, slightly contracted. The quality of its tones equals that of the best Drawing-room Models, added to a brilliancy peculiar to this Harmonium.....Rs. 280
- REMARKS: Can be packed in its box, size 31 inches by 16½ by 20.
- No. 18, 19 and 20.—Three others of the same description in beautiful Rosewood-cases, but without the Pianoforte Action.....Rs. 240
 - No. 21 and 22.—PICCOLO MODEL HARMONIUM. These two Instruments, as their name denotes, are small, exceedingly pretty, and portable, well adapted for a handsome musical present.....each Rs. 150
 - No. 23 to 26.—ROSEWOOD HARMONIUMS, five octaves compass—(four only of this pattern)—highly finished and of a beautiful rich tone.....each Rs. 200
 - No. 27 and 28.—WALNUT WOOD; very choice Harmoniums similar in size and quality to the preceding four, but of softer tone.....each Rs. 200
 - No. 29 to 34.—NEW PATENT MODEL HARMONIUMS (three dozen) in Mahogany and Oakwood cases, all with the full five octave compass, and double foot boards, &c. &c. These Harmoniums have become the most popular musical Instruments of the day, owing to their good substantial make and perfect tone and tune; they are not in the least liable to get out of tune, or give any trouble whatever, if only kept in a moderately dry atmosphere, and protected from vermin. Price each Rs. 100 to 120
- NOTE.—The above magnificent collection has been carefully selected during the months of April, May and June, 1862, from the principal makers in Paris and London. The first half dozen Harmoniums are opened out, and can be seen and heard daily at the Rooms in Rampart Row. The greater part will not be unpacked till after the Moonson; in the meantime orders are being registered.
- Residents in India are respectfully invited to select from H. & Co.'s large stock, which for variety and excellence surpasses any single collection in London or elsewhere. The Instruments can be warranted, having undergone a securing process which, if understood, is seldom headed by the makers at home. H. & Co. have an Assistant who has been employed at Alexandre's factory in Paris, and is perfectly competent to render the beautiful workmanship in all Harmoniums secure from the effects of climate and the ordinary circumstances attending their use in India.

HERBERT & Co.
2, Rampart Row, Fort, 25th August, 1862.

FIGURE 2. Advertisement for the large stock of imported harmoniums for sale by Herbert & Co. Times of India, 25 August 1862, 1.

ROSEWOOD Harmonium. A perfect Drawing-room Instrument, possessing all the qualities of every modern musical instrument combined within the space occupied by a lady's boudoir desk. (Rs. 900)

AN OAKWOOD ORGAN HARMONIUM with ornamental front, fitted with metal pipes like a Church Organ. (Rs. 700)

Although smaller instruments were imported and included in dealers' inventories,⁷ the marketing emphasis is placed (and the profit made) on the more sumptuous exemplars.

ONE OF THE FINEST HARMONIUMS ever imported to Bombay is now on sale at the Rooms, in Rampart Row. The Instrument has the greatest number and variety of sounds; and every quality of tone has been carefully imitated and apportioned among no less than twenty-two different stops; – the softest of which are made to answer, upon an extra row of keys, placed immediately over the keys which give forth the grand tone of the principal Stops in the Instrument; the two keyboards are thus available, precisely similar to Instruments in the Crystal Palace and the new organ in St. Paul's Cathedral. Size 5 feet, by 2 ft 8 by 3 ft 6. The case is of the best seasoned Walnut wood highly polished, – with the new blowing apparatus to work by hand, at the back. The price of this first class and valuable Instrument is Rupees 1,200. The above Instrument is direct from Alexandre's Manufactory in Paris, and is in perfect order. N.B. – can be packed and sent Up-country whole, and warranted to withstand the effects of climate, &c., for many years without requiring repair or tuning. Rampart Row, Nov. 1862 HERBERT & Co.⁸

The instrument's place in domestic life was clearly demonstrated whenever it showed up in a list of household effects.

FOR IMMEDIATE SALE. The Property of a Gentleman leaving the Presidency –

One roomy four-seated Carriage, with German Shutters for the Monsoon, late the property of Sir Henry Somerset.....	Rs. 700
One Brougham in good order, suitable for one or two horses.....	200
One very fast trotting Grey Arab Horse, 6 years old, together with Harness and Buggy.....	600
One Lady's Side Saddle, with third Crutch, nearly new.....	90
One three-quarter Grand Pianoforte by Broadwood, with quilted Cover and packing Case lined with tin. Cost Rs. 1250 a few months ago.....	750

7. Smaller instruments, such as the "PICCOLO MODEL HARMONIUM" for only Rs. 150. See fig.1.

8. *Times of India*, 27 November 1862, 1.

One Rosewood Harmonium with 3 stops, tone first rate.....Rs. 180
Apply to the Manager of this Journal⁹

Judging from the frequency with which used instruments were offered for sale, harmonium owners were frequently displaced, and unable to carry their instruments with them, or else they tired quickly of the harmonium's faddish charms. As a musical instrument, the harmonium seems to have been little more than a popular diversion. Nevertheless, the harmonium's trendy popularity allowed it to saturate the market. Here, harmoniums even appeared in the inventory of miscellaneous Christmas trifles:

DEPOT OF GERMAN TOYS

23, Byculla, Opposite Nesbit Lane.

MR. J. NEUBERG has much pleasure in announcing the receipt, *ex* the "Naval Brigade," "Empress of India," and "Windsor Castle" of the very attractive and elegant *selections* of Goods described below, and now exposed on sale at the above Establishment.

TOYS. – A handsome and carefully selected assortment of German Toys, being a collection of no fewer than *five hundred* different forms, of every possible variety of material, – wood, sugar, leather, glass, tin, &c. – and adapted for every stage of childhood and youth. Special attention is solicited to the opportunity offered on this occasion, to parents, to the conductors of schools, and to all who take an interest in children of introducing in this city more generally than has hitherto been practicable, the time-honoured institution of the CHRISTMAS TREE, so deservedly popular in the West: – a rich variety of MINIATURE ARTICLES expressly designed for the purpose, and now on view, may be selected from.

CHRISTMAS AND NEW YEAR'S GIFTS. – MR. NEUBERG has received the undermentioned choice articles well adapted for gifts, and as *souvenirs* of the season; such as ALBUMS of most elegant workmanship, handsomely bound in morocco, antique style; ALBUMS for PHOTOGRAPHS; CARTE DE VISITE ALBUMS with gilt clasps; PORTFOLIOS fitted with writing materials and stationery gilt mounting; WRITING DESKS of elaborate patterns, and highly decorated; and LADIES' COMPANIONS completely fitted with working materials.

ORNAMENTAL AND USEFUL. – A variety of tastefully finished BOXES (metal) for jewels, gloves, &c.; CARD BASKETS, &c.; EMBROIDERED SLIPPERS and CUSHIONS finished and half finished; also a selection of PATTERNS for EMBROIDERY, with BERLIN WOOL.

HARMONIUMS. – A few solid OAKWOOD HARMONIUMS by the celebrated Maker and Medalist TRAYSER. Intending purchasers are invited to convince themselves, by an examination of these instruments, of their superiority in tone, workmanship, and other qualities.

9. *Ibid.*, 27 November 1862, 4.

LAMPS. – Handsome READING LAMPS, plated and brass stands, milk-glass shades with chimneys. Also lamps with bronze stands. (Spare shades, chimneys, and wicks available.) These lamps have on trial established quite a reputation for themselves in Bombay, they give a brilliant light without in the least distressing the eyes.

N.B. – Ladies and Gentlemen are invited to an early inspection of the above as the Establishment is to be open *only for the season*.¹⁰

Indeed, harmoniums became as ubiquitous in British colonial life as photo albums and reading lamps. Barely an issue of the major Indian dailies went by without some mention of the instrument, if not advertisements from retail establishments, then listings in the “classifieds” for used instruments, or for related services, such as tuition, tuning, or repair.

The Undersigned begs to inform the Musical Public of his return to Bombay from Guzerat, and his intention of resuming his profession as an Instructor of Music. The Piano, Violin, Harmonium, Cornet, &c., and Vocal Music taught at Private Residences and Schools on the most moderate terms. MR. MARTINNANT will be happy to receive orders for tuning and repairing Pianos, HARMONIUMS, and other Musical Instruments. . . .¹¹

The harmonium was in South Asia to stay. Unlike other foreign keyboard instruments that accompanied colonial life (namely, the piano and the pipe organ), the harmonium alone would be able to weave itself into the fabric of local culture and ensure its survival to the present day.

The Portable Harmonium: Evidence from the Patent Office

No sooner had the harmonium been invented than builders began to explore ways either to enlarge it, as if to rival the church organ, or to shrink it, making it portable and cheaper. From a marketing perspective, a portable harmonium could fill a large, important niche while skirting head-on competition with the piano. In distant colonial outposts, where size and mobility held different priorities than at home, smaller would prove to be better.

Of course, the accordion, a popular and very portable free-reed keyboard instrument, already existed and did not need to be reinvented. One builder, however, the Frenchman Constant Busson, was looking at the challenge from just such a perspective. A “Provisional Specification,” filed by him in London (12 November 1853) without diagrams or

10. *Ibid.*, 8 December 1862, 1.

11. *Ibid.*, 27 November 1862, 1.

sketches, describes an accordion-like instrument¹² modified by the addition of a “wind chest.” This reservoir ensures that “when any particular finger-key is acted upon, the note produced is at all times the same.”¹³ Busson’s description may well represent the first recorded history of the box harmonium concept (figs. 3a and 3b).

Most instrument builders, however, were working from the perspective of the large concert harmonium, which needed merely to be reduced in size. It was assumed, at least initially, that these smaller instruments would continue to be played with both hands on the keyboard. It didn’t take a clever inventor to understand that size could be spared by reducing the compass of the instrument and the number of “stops” or lines of reeds. The real challenge lay in how to wind the instrument without resorting to a large traditional case containing feeder bellows, wind reservoir, and foot treadles.

An early response to this challenge came from Ludovico Gavioli in 1855 with his patented “Clavi-accord.”¹⁴ This instrument, shown with a compass of almost four octaves, was self-contained in a case, suitable to be placed on a tabletop or on the knees,¹⁵ with no visible bellows. The internal reservoir, just below the keyboard, was fed by two bellows in the bottom of the case, which were operated via two “rocking beams” under the player’s wrists. These wrist levers allowed the player, with some practice to be sure, to play and pump the harmonium simultaneously. Recognizing the awkwardness of this setup, Gavioli also provided his rocking beams with “annular or hooked ends” to allow the working of both levers with one hand while leaving the other hand free. In this small design feature, Gavioli clearly anticipated the single-handed performance method that would later come to characterize the “hand” harmonium (figs. 4a, 4b, and 4c).¹⁶

12. This relationship to the accordion is revealed in later ads by the Burkinyoung Co. for “Organ Accordions by Busson.” See fig. 9.

13. *Abridgements of Specifications Relating to Music and Musical Instruments A.D. 1694–1866*, 2nd ed. (London: Office of the Commissioners of Patents for Inventions, 1871), Provisional Specification No. 2630 (12 November 1853).

14. *Ibid.*, Letters Patent No. 1592 (16 July 1855).

15. “The bottom of the clavi-accord may also have a hinged board attached to it, in such manner that the instrument may be kept on the knees and inclined into the proper position for playing.” *Ibid.* p. 4.

16. Gavioli’s instrument specifications also introduce another novelty, “the method of placing the keys for the tones and semi-tones all at the same level for part of their length, so as to allow playing the chromatic scale by merely sliding upon the keys, and also a novel form of the keys facilitating performance.”

(a)



A.D. 1853 N° 2630.

Musical Instrument.

(This Invention received Provisional Protection, but notice to proceed with the application for Letters Patent was not given within the time prescribed by the Act.)

PROVISIONAL SPECIFICATION left by Constant Busson at the Office of the Commissioners of Patents, with his Petition, on the 12th November 1853.—A communication.

I, CONSTANT BUSSON, Manufacturer, of Paris, in the French Empire, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN FINGER-KEYED MUSICAL INSTRUMENTS" to be as follows:—

This Invention consists of an improved portable musical instrument of that class of finger-keyed instruments in which the sound is produced by the vibration of metal tongues acted upon by currents of air, and which instrument is furnished not only with bellows, but also with a wind chest, from which the air to act on the tongues, which are arranged in two parallel boards, is drawn, the advantage of this construction being that when any particular finger-key is acted upon, the note produced is at all times the same, in which respect the instrument differs from the ordinary accordion. The instrument is also furnished with two vibrating tongues to each finger-key, which may either be



FIGURES 3a and 3b. Constant Busson, "Musical Instrument," possible first documentation of the hand harmonium concept. *Abridgements of Specifications Relating to Music and Musical Instruments A.D. 1694-1866*, 2nd ed. (London: Office of the Commissioners of Patents for Inventions, 1871), Provisional Specification No. 2630 (12 November 1853).

(b)

2

A.D. 1853.—N° 2630.

Provisional
Specification.*Busson's Improvements in Finger-keyed Musical Instruments.*

both in action at one time, or may act singly, according to the character and intensity of the sound which the player may desire to produce. The instrument is also arranged so as to fold into a smaller space when out of use than that which it occupies when in action.

LONDON :

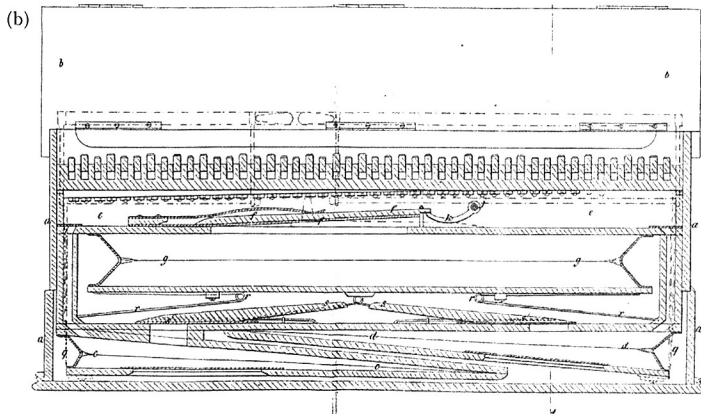
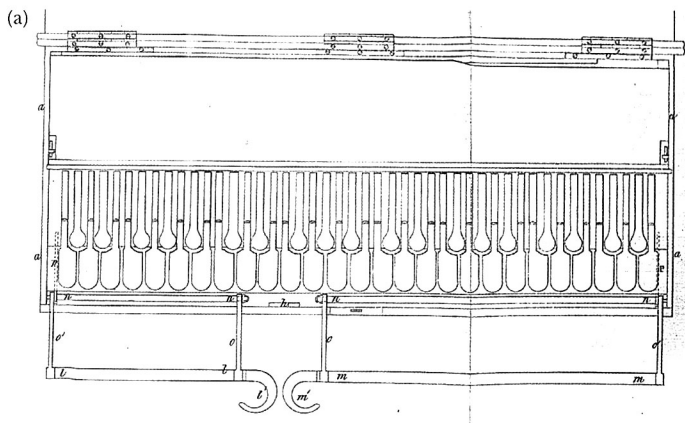
Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1854.

29 JU 55

FIGURE 3 continued

Edouard Alexandre details a mechanism for hand pumping as part of an 1857 patent¹⁷ for an instrument named the “organine.” The reservoir is located in the lower treble side of the case, while a doubled feeder bellows, working on a push/pull principle, is placed in the case’s bass side. Although it could be stored away out of sight, part of the feeder bellows protruded outside the case when in operation, because the player needed to grasp its handle and pump, perpendicularly to the side of the case, to supply the wind chest with air. As a further gesture toward the

17. *Ibid.*, Letters Patent No. 1526 (30 May 1857), 4.



FIGURES 4a, 4b, and 4c. Ludovico Gavioli, "Musical Instrument called the "Claviaccord." *Abridgements of Specifications Relating to Music and Musical Instruments A.D. 1694-1866*, 2nd ed. (London: Office of the Commissioners of Patents for Inventions, 1871), Letters Patent No. 1592 (16 July 1855).

(c)

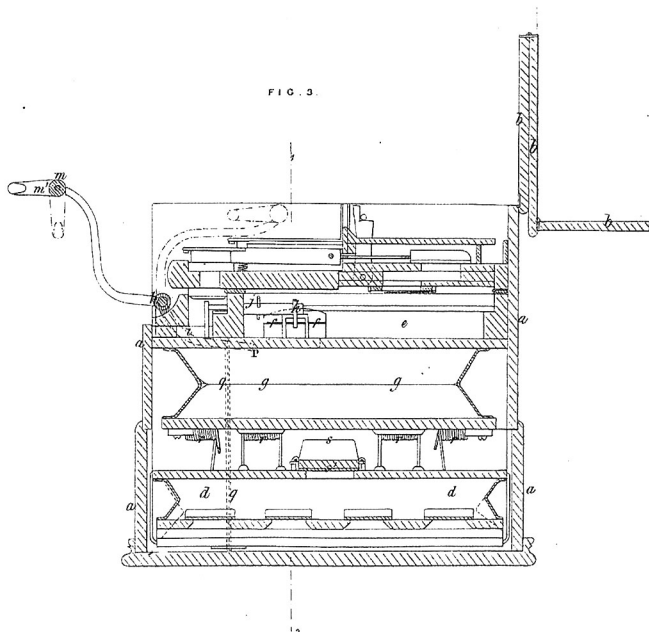
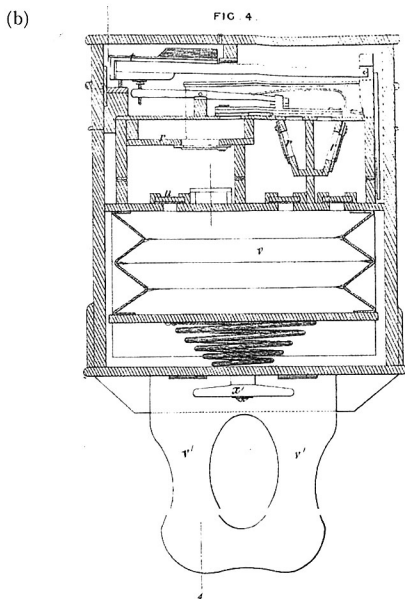
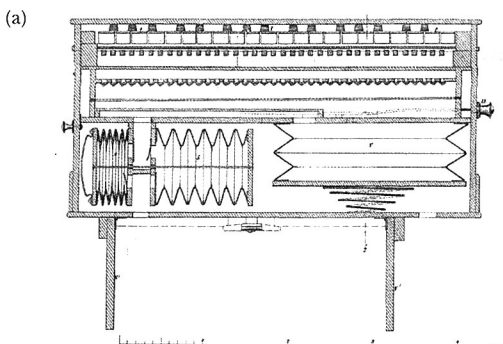


FIGURE 4 continued

portable nature of this instrument, Alexandre supplies two small hinged boards on the bottom of the instrument to help hold it securely on the lap (figs. 5a and 5b).

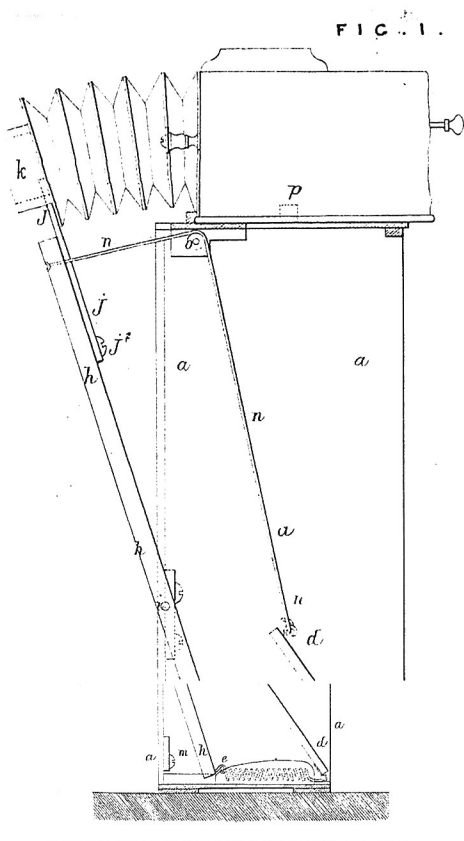
Alexandre, however, does not abandon the idea of two-hand performance on portable harmoniums. His 1861 patent¹⁸ is for “an improved pedal box, to be applied to flutinas or small organs and other similar musical instruments.” While providing a simple foot treadle which can be attached to—and operate—the hand bellows of a small instrument, allowing the player to perform with both hands, this multi-purpose contrivance also serves as a platform for the instrument as well as a storage case (figs. 6a and 6b).

18. *Ibid.*, Letters Patent No. 2674 (25 October 1861).



FIGURES 5a and 5b. Edouard Alexandre, "Organs and other Musical Instruments." *Abridgements of Specifications Relating to Music and Musical Instruments A.D. 1694-1866*, 2nd ed. (London: Office of the Commissioners of Patents for Inventions, 1871), Letters Patent No. 1526 (30 May 1857).

(a)



FIGURES 6a and 6b. Edouard Alexandre, "Pedal Box for Flutinas, Organs, &c." *Abridgements of Specifications Relating to Music and Musical Instruments A.D. 1694-1866*, 2nd ed. (London: Office of the Commissioners of Patents for Inventions, 1871), Letters Patent No. 2674 (25 October 1861).

(b)

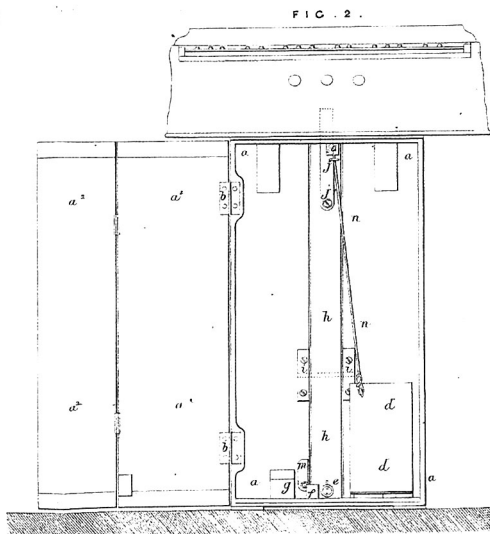


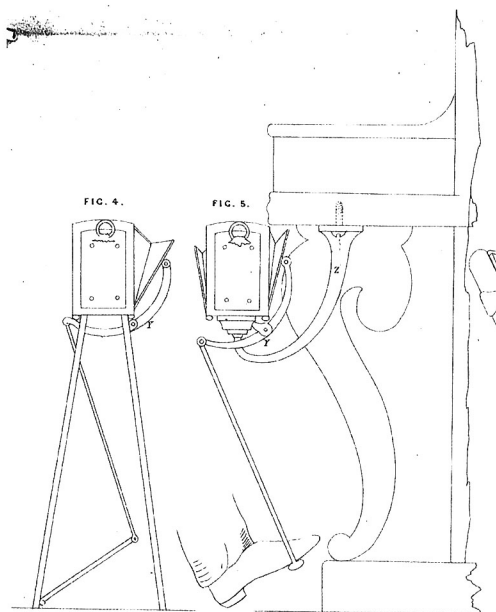
FIGURE 6 continued

A similar, even simpler pumping concept is shown in the specifications for an instrument by Alexandre François Debain granted provisional protection in Great Britain in 1865.¹⁹ This was in reality a simple, hand-pumped instrument but with provisions for a foot treadle.²⁰ The most important element of the design is the bellows itself. Unlike the accordion-like bellows seen in Edouard Alexandre's designs, Debain uses here a wedge-shaped bellows at the back of the instrument. Hinged on one side, and with an internal spring to return the compressed bellows to its open position, this design allowed the left hand, resting perhaps on the top of the case, to operate the bellows with relaxed ease. The reservoir or "regulator" is opposite the bellows on the front of the case. This bellows/reservoir configuration is much like that in the common "sruti box" of India today (figs. 7a and 7b).

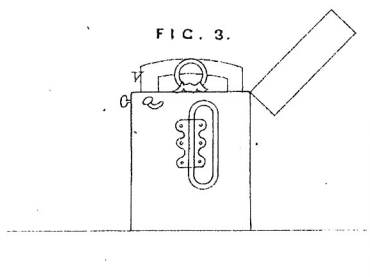
19. *Ibid.*, Provisional Specification No. 2541 (4 October 1865).

20. The real novelty here is that, by attaching the instrument to a piano, as shown in Debain's drawings, one could conceivably play both instruments at once.

(a)



(b)



FIGURES 7a and 7b. Alexandre François Debain, "Musical Reed Instruments." *Abridgements of Specifications Relating to Music and Musical Instruments A.D. 1694-1866*, 2nd ed. (London: Office of the Commissioners of Patents for Inventions, 1871), Provisional Specification No. 2541 (4 October 1865).

Battle for the Indian Market

The contestants:

Harold & Co. (specialty: harmoniums and auto-instruments)

Dwarkin & Son (specialty: Western instruments of all kinds, esp. for band)

Burkinyoung & Co. (enters the harmonium market in 1881)

Perhaps the first advertisement for a *hand* harmonium (with picture) appears on the front page of the *Indian Mirror* on Tuesday, 4 June 1878, placed by Harold & Co. Prior to this, the last ad by Harold & Co. for a parlor harmonium had appeared on 24 May, followed, unusually for this company, by ads for band instruments from 28 May through 1 June. Then on 4 June the hand harmonium is introduced (fig. 8).

The Dwarkin company follows with a similar instrument presented in a small, single-column advertisement on 22 October 1878²¹ (fig. 9), but on the same page, with a large, double-column ad, Harold & Co. announces an improved patent "Harold Flute." As if frightened into submission, Dwarkin does not advertise its harmonium in the first half of 1879, although the "Late Burkinyoung & Co." advertise their "Harmoni-flutes or Organ Accordeons by Busson" for the first time on 13 February of that year (fig.10).²² Harold & Co., having already added a detailed picture of the "New Harold-Flute" beginning on 6 February 1879,²³ introduces the new "Harmoni-flute" with a large front-page advertisement on 9 December 1879.²⁴ Throughout this time Dwarkin is advertising its band instruments, off and on, without mention of harmoniums. Toward the end of 1879, harmonium advertisements, by all the businesses involved, migrate from the front page to the back page (p. 4) of the *Indian Mirror*.

In 1880 Harold & Co. is heavily marketing its New Harold Flute (3 reed lines), Harmoni Flute, and Dulcetas. Dwarkin does little advertising in the *Mirror*, and these few promotions continue to focus on the company's line of band instruments. Dwarkin's "improved" Harmoni-flute, using the same illustration from two years earlier, returns to the paper on 9 July 1880,²⁵ but Dwarkin falls back conservatively to promoting

21. *Indian Mirror*, 1.

22. *Ibid.*, 1.

23. *Ibid.*, 4.

24. *Ibid.*, 1. Spelling of these product names in the press was inconsistent.

25. Also listed there is the more traditional five-octave upright harmonium, called the "People's Harmonium" ("People's Harmoniums of Superior Tone and Finish, 5 octaves, in polished solid oak case, by Alexandre," Rs. 85).

HAROLD & CO.
3, DALHOUSIE SQUARE, CALCUTTA.



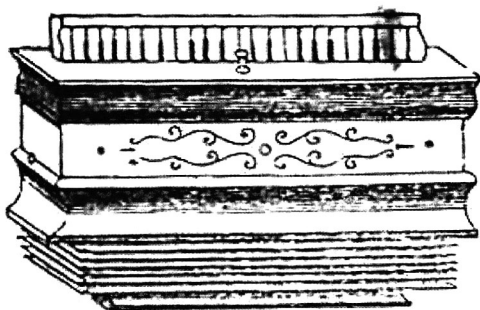
THE
MANUAL SERAFINA.
OR
HARMONIFLUTE.

The Harmoniflute is a rich-toned little instrument, and can be played upon as represented in the engraving, or it can be placed on the table; its portability and its keeping in perfect tone and in good order are not the least of its recommendations, and it is especially suitable for accompanying the voice.

IN CASE COMPLETE

Of 8 Octaves with one Stop	Rs 25
Of 8 " " three "	" 30
Of 8 1/2 " " one "	" 20

FIGURE 8. First advertisement for a hand harmonium, the "MANUAL SERAFINA OR HARMONIFLUTE" offered by Harold & Co. *Indian Mirror*, 4 June 1878, 1.



DWARKIN & SON,
 Importers of Musical Instruments,
 6, Bowbazar Street, near Calcutta Police.

HARMONIFLUTES 3 octaves by Busson.
CLARIONETS in C, B, & A Cocoa 13 G. S. keys.
CORNETS new model with Crooks complete.
FLUTES & Piccolos in F, 8 German silver keys.

Sold at fixed moderate prices.

FIGURE 9. First hand harmonium advertisement from the Dwarkin & Son company. *Indian Mirror*, 22 October 1878, 1.

its traditional foot-pumped harmonium, featuring it with picture, beginning on 22 September 1880.²⁶ In 1881 Dwarkin does very little advertising (none in the second half of the year), but the upstart Burkinyoung & Co. places small notices throughout the year for its "Seraphina-Angelica." Nevertheless, until the later 1880s, Harold & Company seems to dominate the market, based on its large quarter-page ads during the period²⁷ and the publication of its own harmonium tutor, "How to Learn

26. *Indian Mirror*, 4.

27. See *Indian Mirror*; 1 January 1885.

**THE CALCUTTA
MUSICAL ESTABLISHMENT,**

(LATE BURKINYOUNG & CO.)

1814,

13-1, GOVERNMENT PLACE, EAST.

THE following new instruments are offered for sale at reduced prices for cash only.

English Concertinas, full compass, 48 notes from ...	Rs. 58 to Rs. 125	Harmoni-flutes or Organ Accordeons by Busson, improved Manufacture, compass 3 and 3½ Octaves, from ...	Rs. 55 to Rs. 75
Anglo German ditto, 20, 22, 24 and 28 keys, from ...	" 20 to " 40	Ocarinas of sizes, from ...	" 1 to " 4
Anglo German ditto, 20 keys in paper case ...	" 15	Maelzel's Metronomes with and without Bell from ...	" 20 to " 30
Melodeons Playing 6 Tunes with improved shifting stop ...	" 40	Guitars, superior with Machine heads in cases, from ...	" 70 to " 90
Melodeons Playing 8 Tunes with improved shifting stop ...	" 50	Guitars, ordinary with Machine heads without cases, from ...	" 25 to " 30

C. GOULD,
Proprietor.

FIGURE 10. Advertisement for "Harmoni-flutes or Organ Accordeons by Busson" by the Late Burkinyoung & Co. *Indian Mirror*, 13 February 1879, 1.

Harold & Co.'s Improved Harmoni-flute Without the Aid of a Master," by S. Harold.²⁸

Dwarkin & Son aggressively reenters the hand harmonium competition in 1886, announcing a large shipment of "box harmoniums."²⁹ These instruments, guaranteed for one year, were "made expressly for the Indian Climate." These added considerations indicate a challenge to the dominance of Harold & Co., and by the second half of 1887, the spirited competition between the two firms has really heated up.³⁰

On 11 October 1887, Dwarkin & Son introduces its own trademarked namesake, the "Dwarkinflute," the "best and cheapest musical instrument in the market." Although there is no picture, the instrument's de-

28. Also during this period, Harold & Co. reasserts its presence as an importer of all manner of Western instruments (*Indian Mirror*, 12 March, 1885, 1) and auto-instruments (*Indian Mirror*, 8 September 1887). Uniquely tailored for the Indian market are "musical boxes with sitar accompaniment," which play an assortment of "popular Indian airs."

29. *Indian Mirror*, 1 January 1886, 1.

30. The instrument description, which mentions being supplied with "native scales," must mean that a booklet, notating some common Indian ragas, was included.

scription and guarantee³¹ clearly defy Harold & Co. to keep pace. Above all, the price of Rs. 40 is unbeatable, especially for a three-stop instrument. Although three-stop instruments had always been available, simple one-stop harmoniums were the norm.

More important, Dwarkin, traditionally an importer of instruments, is listed here for the first time as "Manufacturers and Importers of Musical Instruments." If this self-identification as *manufacturer* can be linked to the company's new harmonium, then Dwarkin & Son can accurately claim to be the first Indian builders of what will later be known as the Indian hand harmonium.³² In fact, by early 1888 Dwarkin & Son has removed the term "importer" completely from its title and promotes itself succinctly as "Manufacturers of Harmoniums."³³

Dwarkin's reentry into the harmonium competition is quickly answered by Harold & Co.³⁴ with a large advertisement for its "New 'Harold-Flute.'" The premium price of Rs. 125 (for a three-octave instrument) was justified by its four stops, the fourth stop being a "tremolo stop to imitate the human voice."³⁵ No guarantee is offered, nor any claim that the instrument is suited for the Indian climate. The importance of the Harold & Co. brand, however, as the dominant name in hand harmoniums for over a decade is indicated by the disclaimer "No Instrument is genuine unless it bears Harold & Co.'s name." Three days later, Harold & Co. admits the arrival of a "very large" shipment of its "improved harmoni-flutes" (the now-obsolete, one-stop model) but at a price of Rs. 35, refuses to give them away.³⁶

31. "... large keys ... warranted not to stick at any time." In the cleverly worded warranty, instruments are "guaranteed to withstand the Indian climate *longer* [author's emphasis] than any other similar instruments."

32. It is clear, in contemporary and later advertisements by Harold & Co., that its hand harmoniums continued to be imported.

33. An ad, however, in the *Indian Mirror* (1 September 1888, 4), using an unusual logo for the firm, uses the earlier title, "Dwarkin & Son, Importers of Instruments & Strings," with the announcement, "Just received a large invoice of Busson's Patent Harmoniflutes." Both the logo and the advertisement are an odd flashback to the firm's image early in the decade.

34. *Indian Mirror*, 22 October 1887.

35. Unfortunately, in this and later ads, a typographical error in the tremolo-stop's description claims that "It *cannot* [my emphasis] be used with beautiful effect as an accompaniment for the voice, or for solo playing, or for concerted music."

36. This is not such a bargain, considering that the same instrument had already been marked two years earlier for Rs. 38, and the new, three-stop Dwarkinflute is available for only Rs. 40.

Dwarkin & Son trumps its competitor once again in December 1887³⁷ by concluding the Dwarkinflute advertisement with the following testimonial:

From Sir Raja Sourendra Mohun Tagore, Kt., Music Doctor (Phil.),
&c.

Pathuria Ghata Rajbati, Calcutta, 10th September 1887

Dear Sir,

I have examined "the Dwarkin-flute," which you have sent me; and I have the pleasure in letting you know that the tone and finish of the Instrument leave nothing to be desired. In my opinion, it is very well suited for the execution of Operatic Pieces and of Indian Songs. I recommend your Instrument to the musical public.

I remain, Yours faithfully,
S.M. TAGORE³⁸

The date of Tagore's celebrity tribute predates by a month the advertised debut of the Dwarkinflute in the *Indian Mirror*, but the letter was not published until later, certainly as a response to Harold & Co.'s new product, the Harold-Flute (fig. 11).

At the beginning of 1888,³⁹ a new rival, adhering to the recent industry standard of three stops, appears under the name "Mohin-Flute," manufactured by the Mohin Bros. "with a view to meet a consideration long felt by the musical public of India." What this "consideration" might be is unclear. Its advertised features introduce nothing beyond those already available in the Dwarkin-Flute or Harold-Flute. Perhaps the availability of an "Indian Model" (although it is not further described) is the novelty. Alternatively, the point might be that the Mohin-Flute is "distinguished by its mellow and rich organ tone," indicating perhaps a reliance on the so-called "American" pump-organ winding (suction) rather than traditional harmonium winding design (pressure). Nevertheless, the Mohin-Flute can be easily compared with the Dwarkin-Flute, for it is sold by Messrs. Mandal & Co. at No. 5 & 7, Lower Chitpore Road, just down the street from Dwarkin & Son at 2 Lower Chitpore Road. On Tuesday, 10 January 1888, the two instruments are even advertised side-by-side in

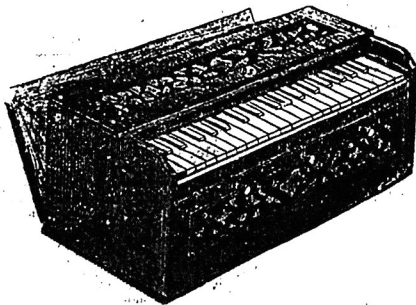
37. *Indian Mirror*, 24 December 1887, 4.

38. Sourindro Mohun Tagore (1840–1914), one of several musical Tagore brothers (including poet and Nobel laureate Rabindranath Tagore), was founder of the Bengal Music School and Bengal Music Academy.

39. *Ibid.*, 1 January 1888, 4. The same ad would appear on page 1 of the 4 January edition.

With 3 stops, in case, Rs. 40 cash.
GUARANTEED FOR ONE YEAR.

THE
DWARKIN-FLUTE.



DWARKIN & SON,
 3, Lower Circular Road, Calcutta.

THIS charming and portable Instrument is played with one hand, by means of a Key Board, either resting on the knee or placed on a table like the Box Harmonium. It is tuned in concert pitch, and has a compass of 3 octaves including the semi-tones. The Bellows at the back of the instrument is perfectly easy of management, and large keys, which are warranted not to stick at any time, have been used to make the playing comfortable.

This instrument is very suitable for the INDIAN MUSIC specially as an accompaniment for the voice and concerted music; its tone is MOST POWERFUL and AS SWEET AS CAN BE DESIRED.

It being made of SOLID SEASONED wood and excellent reeds and materials and the construction being WONDERFULLY STRONG AND SIMPLE can be GUARANTEED TO WITHSTAND THE INDIAN CLIMATE LONGER THAN ANY OTHER SIMILAR INSTRUMENTS.

LETTER ABOUT THE DWARKIN-FLUTE.

From Sir Raja Sourendra Mohun Tagore, Kt., Music Doctor (P.H.), &c.

Pathuria Ghats, Rajbati, Calcutta, 10th September 1887.

Dear Sir,

I have examined "the Dwarakin-flute," which you have sent me; and I have the pleasure in letting you know that the tone and finish of the instrument leave nothing to be desired. In my opinion, it is very well suited for the execution of Operatic Pieces and of Indian Songs. I recommend your Instrument to the musical public.

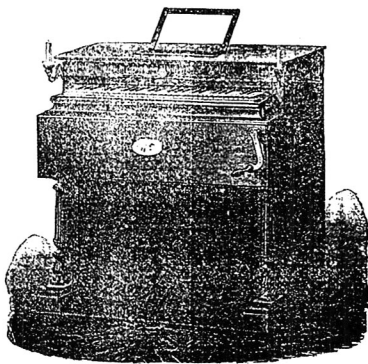
I remain, Your faithfully,
S. M. TAGORE.

FIGURE 11. Advertisement for the "DWARKIN-FLUTE" with recommendation from Sourindro Mohun Tagore. *Indian Mirror*, 24 December 1887, 4.

the *Indian Mirror*. Harold & Co., always the larger advertising presence, attempts just above these ads to introduce a new product, its "Organista-Orchestrina," but as a large, upright auto instrument, priced at Rs. 350, ten times the price of a hand harmonium, it is clearly aiming for a different demographic (fig. 12).

By this time, it becomes clear in the Calcutta press that the hand harmonium has moved beyond the British community and positioned itself in the educated Indian community. Dwarakin & Son introduce a printed method book, *The Harmoni-Flute or Box-Harmonium Tutor without a Master*

THE
ORGANISTA--ORCHESTRINA.
 PLAYING
 BENGALEE AND HINDOOSTANEE TUNES



THIS CHARMING INSTRUMENT derives its name from its capability of imitating, by mechanism, the ORGAN STYLE required for sacred music and the ORCHESTRA STYLE REQUIRED FOR OPERATIC DANCE, or for any secular music. It can also be played upon by hand in the nasal style of the Harmonium or Organ. Its portability recommends it for use in churches, camps, and on ship board. HARMONIUM MUSIC is suitable for the Orchestra.

Price of the Organista-Orchestra, of 4 octaves and two stops, with one barrel, Cash Rs. 250

Price of additional barrels

Rs. 45 each

HAROLD & CO.,

2, Dalhousie Square, Calcutta

THE **DWARKIN-FLUTE.**



WITH 3 SIGNS IN CHG. RS. 40 CASH.
 GUARANTEED FOR ONE YEAR.

THIS charming and portable instrument is played with one hand by means of a Key Board, either resting on the knee or placed on a table like the Harmonium. It is found in musical shops and has a number of notes including two octaves. The six keys on the back of the instrument are perfectly easy of management, and large keys, which are essential not to stick at any time, have been and to make long playing comfortable.

This instrument is very suitable for the INDIA MUSIC, especially as an accompaniment for the voice and, arranged as well, in use in WEST INDIES and AS WELL AS CAN BE DESIRED.

It being made of SOLID STAINED WOOD, with brass and metal parts and the mechanism being INDISPENSIBLY STRONG AND SIMPLE, CAN BE GUARANTEED TO WITHSTAND THE URGENT CLIMATE WORSE THAN ANY OTHER MUSICAL INSTRUMENT.

LETTERS TO THE DWARKIN-FLUTE.
 From Sir Raja Ramooboy Bahadur, Esq., Madras (India), Esq.,
 P.O. Office, Calcutta, dated 10th November 1887.

I have received the Dwarkin-Flute which you have sent me; and I have the pleasure to inform you that the tone and level of the instrument have nothing to be desired. In my opinion, it is very well suited for the execution of Operatic Pieces and of Indian Music, and I recommend your instrument to the general public.

Yours faithfully,
 R. M. TAPSCOTT

SEIN & FRIENDS
 TAILORS & OPTICIANS.

THE **MOHIN-FLUTE.**



Manufactured in Calcutta by Mohin Bros. & Co., 10, Dalhousie Square, Calcutta.

THIS charming flute instrument is distinguished by its Mohin and Hindoo Organ Tunes, which render it a desirable accompaniment to the voice in the concert. Its very necessary for the execution of such which renders it a necessity for the Indian music and the very same for which it is used in India.

It is made of SOLID STAINED WOOD, with brass and metal parts and the mechanism being INDISPENSIBLY STRONG AND SIMPLE, CAN BE GUARANTEED TO WITHSTAND THE URGENT CLIMATE WORSE THAN ANY OTHER MUSICAL INSTRUMENT.

Yours faithfully,
 R. M. TAPSCOTT

MOHIN BROS. & CO.
 10, DALHOUSIE SQUARE, CALCUTTA.

FIGURE 12. Adjacent advertisements by the music shops, Harold & Co., Dwarkin & Son, and Mohin Bros. *Indian Mirror*, 10 January 1888, 4.

by Kumar Pramod Kumar Tagore, for the price of Re. 1.⁴⁰ The striking point about this little harmonium tutor is that it is published in Bengali. One day later, another Bengali instructional book is announced (although it would not be published until March), *The Harmoni-flute or Box-Harmonium Tutor without a Master, Complete in Two Parts*, by Gopal Chunder Chatterji.⁴¹ Harold & Co., which advertised its first tutor in 1885, offers a Bengali tutor, *The Harmoni-flute or Harold-flute Tutor*, in the same ad, which praises the company's instruments as being "admirably suited for the performance of INDIAN MUSIC."⁴² Just below this ad, however, the Dwarkin ad actually allows some Bengali to creep in exotically to promote its available publications: Kumar Pramod Kumar Tagore's *Popular Bengali Harmoni-Flute Shikh[s]a*, Babu Upendra Kisor Ray Chaudhuri's *Harmonium Shiksha without a Master*, and Babu Dakshina Charan Sen's *Aikatanik Shara Shangroha* (fig. 13). During this flurry of publishing activity, Dwarkin also expands its usual advertisement for the Dwarkinflute to include a clear gesture toward the performance of Indian music: "This instrument is very suitable for the *Indian Music*, especially as an accompaniment for the voice and concerted music; its tone is *most powerful and as sweet as can be desired*."⁴³

While making gestures with hand harmoniums toward an Indian clientele, Calcutta music shops may have sensed their neglect of their traditional customers, the British colonial households, and the instruments needed for domestic European music-making. For example, Dwarkin & Son also begins to remind the public of the availability of foot-pumped instruments (although it never returns to marketing large, imported "parlor" harmoniums or pianos). In March 1888, Dwarkin's "traveling harmonium" is offered for sale. The advertisement provides no description of the instrument, but a clear illustration is supplied. At first glance, it appears that Dwarkin's traveling harmonium is nothing more than its "Dwarkinflute" atop a pedal box along the lines of Alexandre's patent of 1861 (see above, footnote 19). According to Alexandre's concept, while the instrument remained pumpable by hand, it

40. *Ibid.*, 22 February 1888, 4.

41. Unusual is that this latter method is offered privately for sale, not through one of the major instrument dealers: sold by Radha Nath Mitra, 26 Prosunno Coomar Tagore Street, or 1 Bacharam Chatterjee's Lane, Beadon P.O., Calcutta.

42. *Indian Mirror*, 2 September 1888, 4.

43. This ad is also expanded to include additional testimonials predating even Tagore's (see above) from Babu Modon Mohun Barman, and Babu Shyamllal Goswami. *Indian Mirror*, 24 February 1888, 4.

HAROLD & CO.

"THE CALCUTTA MUSICAL DEPOT."

The following Instruments are admirably suited for the performance of
INDIAN MUSIC, viz :—

THE "HARMONI-FLUTE" (Box-Harmonium) from;	...	Rs.	40	Cash
THE "HAROLD-FLUTE"	...	"	125	"
THE HARMONIUM (Table-Harmonium)	"	"	75	"
THE CLARINET	"	"	85	"
THE CORNET	"	"	35	"
THE VIOLIN	"	"	10	"
THE ORGANISTA-ORCHESTRINA, played either by turning a handle or in the same way as a Harmonium from	...	"	350	with one barrel

Musical Boxes playing Indian Tunes.

HAROLD & CO.'S STOCK of the above is unsurpassed for variety and cheapness

The boxes are all of best make and finish, and are in perfect tune. They are all fitted with the new patent winder.

"The Harmoni-flute or Harold-flute Tutor"

IN

BENGALI;

PUBLISHED BY

HAROLD & CO.

Cash Price, One Rupee per copy.

Musical Instruments of every description ; a large stock always on hand.

CATALOGUES, FREE BY POST.

HAROLD & CO

FIGURE 13. Advertisements for harmonium instruction books. *Indian Mirror*, 2 September 1888, 4.

could also be positioned on top of its storage/carrying case, which contained a mechanism for pumping the hand-bellows by foot using a single treadle. Dwarkin's illustration, however, clearly shows two foot treadles, suggesting that the case contained its own feeder bellows (perhaps di-

3, Dalhousie Square, Calcutta.

BENGALI MUSIC BOOKS.

KUMAR PRAMOD KUMAR TAGORE'S
POPULAR BENGALI HARMONI-FLUTE SHIKHA

Price Re. 1.

Harmonium Shiksha,

WITHOUT A MASTER, IN BENGALI.

BABU UPENDRA KISOR ^{BY} RAY CHAUDHURI, B. A.

Price Re. 1.

Aikatanik Shara Shangroha.

I. II.

Containing 100 new and popular Indian Airs and Songs, in Bengali.

BABU DAKSHINA CHARAN SEN,

Musical Director of the Orchestra—Star Theatre.

Price Re. 1.

TO BE HAD OF

MESSRS. DWARKIN & SON,

2, Lower Chitpore Road, Calcutta.

FIGURE 13 continued

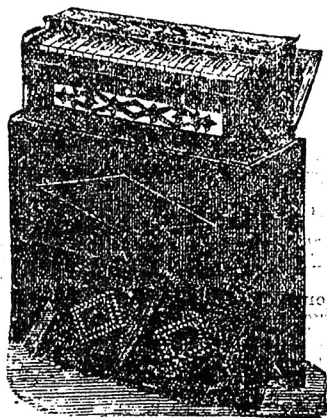
rectly beneath the treadles) which could be engaged to wind the instrument above (fig. 14).

A half-year later, Dwarkin brings its "Seraphina" onto the market.⁴⁴ Although Dwarkin claims it to be a "new invention," Burkinyoung & Co. had first marketed a foot-pumpable "Seraphina-Angelica" in 1881; Harold & Co. had even used the name Serafina in 1878 already as a synonym for the Harmoniflute.⁴⁵ Characterized by its wing-like upright

44. *Indian Mirror*, 21 September 1888, 1.

45. *Ibid.*, 4 June 1878, 1.

DWARKIN'S TRAVELLING HARMONIUM.



FR m Rs. 70.

DWARKIN & SON,
Manufacturers of Harmoniums,
CALCUTTA.

FIGURE 14. Advertisement for the "TRAVELLING HARMONIUM" from Dwarkin & Son. *Indian Mirror*, 24 March 1888, 4.

bellows, hinged at one side on the top of the instrument (instead of in the rear), Dwarkin's Seraphina is nothing more than a hand harmonium with a simple stand and a single, detachable (and optional) treadle. Whereas the Burkinyoung model is described as "sweet and dulcet," having three stops and two lines of reeds, the Dwarkin Seraphina is described as "louder and sweeter" than the Harmoni-Flute. Dwarkin's instrument features but a single stop, although there are still two lines of reeds.

The tiny Seraphina is clearly a marketing misstep. By December of the same year, Dwarkin publicizes a major price reduction in this instru-

ment, although no new competing harmonium product has been announced in the press to suggest a need for price slashing. Indeed, immediately adjacent the advertisement for the Seraphina sale is an ad for the Mohin-Flute, for which Dwarkin already had an adequate equivalent in its own Dwarkinflute. The real competition, the pianoforte, seems to have caught the Calcutta music shops by surprise (fig. 15).

Although pianos were heavily marketed in the Bombay press during this time, they were considerably less evident in Calcutta. Harold & Co. did list pianofortes for sale in those ads which featured the breadth of the shop's inventory,⁴⁶ but the piano's popularity seems to have grown in the shadow of the heated harmonium competition of the 1880s. As the harmonium was becoming "miniaturized" and gaining popularity among Indian musicians, the piano was taking over as the preferred domestic instrument for British colonials.

As the harmonium wars of Calcutta are still being waged, and as indigenous manufacturing of harmoniums is gearing up there, firms such as S. Rose & Co. and Marcks & Co. Limited, both in Bombay, are beginning to cash in on the pianoforte's growing prominence. Pianos "specially made for India," are expensive, compared to the little hand harmoniums, but a small five-octave model is available from Rose for as little as Rs. 280.⁴⁷ Financing over 12 or 24 months is also available. By 1888 or 1889, harmonium advertisements have been almost completely replaced in the Bombay press by piano ads; in Calcutta, the onslaught of imported pianofortes is not far behind. Thus, the fickle European expatriates quickly abandon the harmonium, but its future is ensured by the native population, which adopts it and makes it, with some reservations, their own (fig. 16).

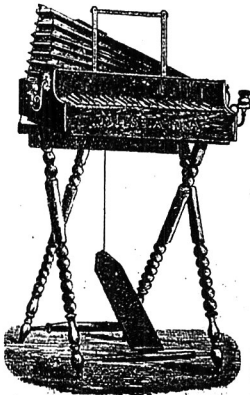
Playing Position

Numerous patent drawings and newspaper illustrations provide useful information about the pumping technique and playing position, as harmonium design evolved in the direction of small and portable. The European norm, of course, was that musical instruments were performed upon by players, seated in chairs. This standard made the winding of the harmonium via foot treadles and feeder bellows a self-evident proposition. Also, the harmonically based texture of Western keyboard

46. *Indian Mirror*, 12 March 1885.

47. *Times of India*, 11 June 1889, 1.

GREAT REDUCTION. THE SERAPHINA!



Out-side dimensions of the Instrument (without stand) 24 by 14 by 8.

This is a new invention, its chief features are—

- (1) Its tone. This resembles that of the Harmoni-flute, but is much louder and sweeter.
- (2) It is more strongly built and put together.
- (3) Its keys are much larger.
- (4) It is the grandest looking-Instrument of the kind, ever offered to the public.
- (5) It has a pretty pedal stand, which can be put on, and taken out, at pleasure, thus making it a Hand or a Table Harmonium.
- (6) The bellows are so constructed as to be a great measure to make up for the absence of any capricious wind.

Emblized 3 octaves, 1 stop, 2 sets of reeds, in strong case, with a pair of Chandeliers and Music Desk with blowing shoes, Rs. 55

Ditto ditto with Pedal Stand 65

DWARKIN & SON,
CALCUTTA.

THE
CALCUTTA ARMOURY & Co.,
No. 111—MISSION ROW (ROUND THE CORNER.)
Guns, Rifles, Pistols, Ammunitions,
Shooting and Fishing Tackles, Fencing,
Sawing, Carriage & Machine
Tools, &c.
Mathematical Instruments, Bengali
Survey Compasses, and Marble Spec-
imens, for sale at unprecedented low
prices.

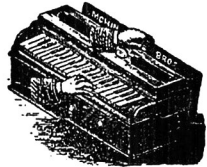
SHIB KRISTODAW & CO.,
IRON MERCHANTS & CONTRACTORS
Importers of all kinds of
Metals, Paints and Oils,
ROBERTSON'S
SHEEPSHANK COLLARS,
Assam, 6 miles connected with Trainway.
Rolled Iron Bars
of all sizes and shapes.

Managing Agents,
LYALL MARSHALL & CO.,
4, Clive Ghat Street, Calcutta.

THE MOHIN-FLUTE

COMPRISING a Compass of 3 octaves with 3 stops, has been expressly manufactured by **MOHIN BROS.** with a view to meet a consideration long felt by the musical public of India.

Guaranteed for one year.



(Highly spoken of and certified by Sir Rajah Sourindra Mohun Tagore, Kt., Esq., Doo, Esq., and all the leading Music Professors of Calcutta.)

This charming little instrument is highly valued by its Mellow and Rich Organ Tone, rendering it a desirable accompaniment to the voice or the Concert, by its easy Portability, by its Durability of make which renders it a proof to the Indian Climate, and by the simple and ingenious structure of the Bellows and the Key Frame for which the Keys are never liable to come out. Price in case (F to F) Rs. 25-40-00. Indian-made instruments have never appeared in the market. **MOHIN BROS.** beg to announce that their instruments are genuine and must market on the Bellows, which are made by **MOHIN BROS.** It is the only one of its kind in the world.

FIGURE 15. Sale advertisement for the "SERAPHINA" by Dwarkin & Son. *Indian Mirror*, 21 December 1888, p. 4.

Apply to THE MANAGER.

THE Undersigned begs to inform his numerous Patrons, Gentlemen and the Public, that he has quite recently received the following GOODS of the best quality. Suits made at a short notice and perfect fit established. Prices are exceptionally cheap to suit every body.

Genl's Outburns Coats and Trowsers..... Rs. 18 to 20 a Suit.
 Do. Dark Blue and Black Serge do..... 15 to 18 "
 Do. Coloured do..... 15 to 18 "
 Do. Best Cricketing White Flannel Suits..... 20 to 25 "
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FIGURE 16. Advertisement for "PIANOS" by S. Rose & Co. *Times of India*, 11 June 1889, p. 1.

music presumed that the player would use both hands in performance. Movement away from foot-pumping implied also a movement away from the Western keyboard texture.

As described above, early evidence of hand-pumping is found in Debain's 1865 provisional specification for "improvements in musical reed instruments of the harmonium class." The innovations described and illustrated here are for an instrument which may be "placed on a table, or the performer may work it on his knees. It may also be played with both hands, and in that case the instrument must be mounted on a stand, or else secured to a piano." The inventor goes on to describe the bellows, "which are operated by the left hand whilst the right hand is traveling on the keyboard. This kind of bellows and its reservoir have never before been used in this kind of instrument . . . [with an] elastic spring inside the bellows for opening them after compression."⁴⁸ This spring-loaded bellows was a significant convenience, because it freed the performer from the menial task of reinflating the bellows after each compression.

An early illustration of a "laptop" harmonium (the "manual serafina or harmoniflute") is found in Harold & Co. advertisements from the summer of 1878. As described, it "can be played upon as represented in the engraving [resting on the lap], or it can be placed on the table; its portability and its keeping in perfect tune and in good order are not the least of its recommendations, and it is specially suitable for accompanying the voice."⁴⁹ In later illustrations,⁵⁰ the hands become disembodied, and it is no longer clear whether the instrument is placed on the table, lap, or floor (fig. 17).

48. *Abridgements of Specifications*, Provisional Specification No. 2541 (4 October 1865), 1–2. An instrument almost identical in appearance to Debain's drawings appears in the Indian press in an 1880 advertisement by Harold & Co. (*Indian Mirror*, 19 August 1880, 4). Called the "Dulcetina," it is promoted as "resting either on a table or on the knees, or is attached to an elegant Pedal-stand." Like Debain's instrument, it is also suggested that the instrument can be used successfully "in combination with the pianoforte."

49. *Indian Mirror*, 19 August 1880, 4. See a different illustration of a similar instrument in *Indian Mirror*, 14 February 1880, 4.

50. For example, *Indian Mirror*, 1 January 1886, 4 (Dwarkan & Son.) or *Indian Mirror*, 1 January 1888, 4 (Mohin Bros.).

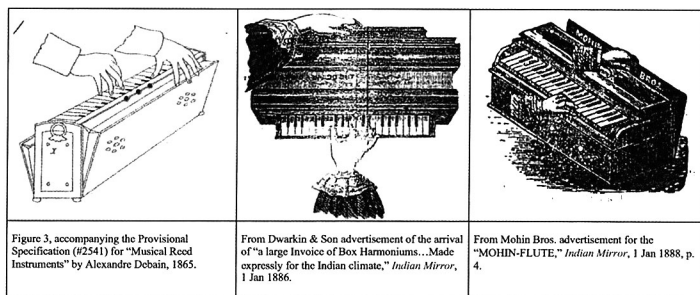


FIGURE 17. Illustrations of hand-harmonium playing positions

Conclusion

This research does not document the actual beginnings of harmonium use in indigenous Indian music, but it does detail the evolution of the instrument into a form more suitable for that music. This modest evolution, however, addressed only the issues of size, portability, and playing position. More profound musical matters, such as equal-tempered tuning and Western twelve-pitch octaves, would not be tackled successfully and would ultimately become the source of much future controversy.⁵¹

51. Some experimentation with these problems was done in the early twentieth century, but to no lasting effect.

So ultimately, when the harmonium made the leap to Hindustani and other South Asian musical styles, it would be positioned on the floor (and used by musicians seated on the floor) rather than on the table or lap, but it remained tuned to the Western scale. Performers developed sophisticated techniques to extend the limited capabilities of the instrument, using elaborate ornamentation and diverse articulations, but technological solutions (such as the addition of “split” keys to access additional microtones) would be rejected.

The suspect Western origins of the harmonium have kept the solo harmonium off the Indian airwaves since the 1940s. During that time, however, it has asserted itself as an indispensable accompanying instrument for the voice (as prophesied by Harold & Co. in 1880). Indeed, its utility and mass popularity in performances of dhrupads, khayals, thumris, and ghazals makes it irreplaceable today. Thus, almost a century after the harmonium ceased to be commercially or musically viable in the West (a fact which surprises many Indians), it continues to play a flourishing musical role in the rich culture of South Asia.