



# NEWSLETTER

Of The

## *American Musical Instrument Society*

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**OUR COVER** shows a unique surviving example of a harpsichord updated to later musical fashions by being fitted with hammers that permit it to be played as a piano if desired. Unlike the more numerous harpsichords actually converted to pianos, this one retains its harpsichord mechanism largely intact, and the piano hammers are contained in a separate attachment that is engaged only when the right-hand pedal is depressed. The ingenious piano mechanism was devised by Joseph Merlin, a Fleming who is also credited with the invention of the roller skates and the wheelchair, which is still called "Merlin's chair" in England.  
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The NEWSLETTER is published three times yearly — June, October and March. All correspondence should be directed to THE NEWSLETTER Editor, William Maynard, 17 Lincoln Avenue, Massapequa Park, New York 11762. Photos and short news items will be welcome.

Requests for membership in AMIS may be submitted via the Editor's office.

**AMERICAN MUSICAL INSTRUMENT SOCIETY  
(AMIS)**

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**COVER STORY (Continued)**

This piano mechanism was included in Merlin's patent of 1774 for "A new kind of compound harpsichord, in which, besides the jacks with quills, a set of hammers of the nature of those used in the kind of harpsichords called piano forte, are introduced in such a manner that either may be played separately or both together at the pleasure of the performer, and for adding the aforesaid hammers to an harpsichord of the common kind already made, so as to render it such a compound harpsichord."

A complete "compound Harpsichord" made by Merlin in 1780 is preserved in the collection of the Deutsches Museum in Munich (it is pictured in Raymond Russell's *The Harpsichord and Clavichord* on Plate 79), and the instrument shown here is an example of Merlin's addition of his hammer mechanism "to an harpsichord of the common kind already made." The harpsichord itself was made by Jacob Kirkman in London in 1758 and is a typical example of his work at this relatively early period; it has two unison stops and an octave stop, and it bears Kirkman's signature in the usual position on a batten just above the keyboard (Fig. 1) as well as having his IK rose in the soundboard.

Merlin's piano attachment fits above the jacks (Fig. 1) and is separately inscribed "Josephus Merlin Privelegiarius Novi Forte Piano No. 89, Londini, 1779." Thus it was added to the harpsichord when it was already 21 years old. This is just the period of the piano's first great popularity in London and of the publication of J. C. Bach's "Four Sonatas and two Duetts for the Piano Forte or Harpsichord," Op. XV, one of the earliest collections in this time of transition to list the piano before the harpsichord on its title page.

The hammers in Merlin's attachment strike the strings from above and are pivoted in a rack set just ahead of the jacks (Fig. 2). When the mechanism is engaged by depressing the right-hand pedal, the entire row of hammers is moved closer to the jacks. This permits special pivoted tongues

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Fig. 1: Front view of the Merlin attachment.

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inserted into the front edge of the first row of jacks to catch the back end of the hammers when the keys are depressed and the jacks are lifted. When the back end of a hammer is raised by one of the special jack tongues, the head of the hammer is flipped downward and strikes the strings (Fig. 2), after which it is returned to its original position by a spring. As indicated in Merlin's patent specification, the quill plectra of the jacks may be permitted to pluck the strings at the same time that the hammers strike them; however, the musical effect of this is not satisfactory, since the hammers tend to damp the plucked strings rather than to make them sound more loudly.

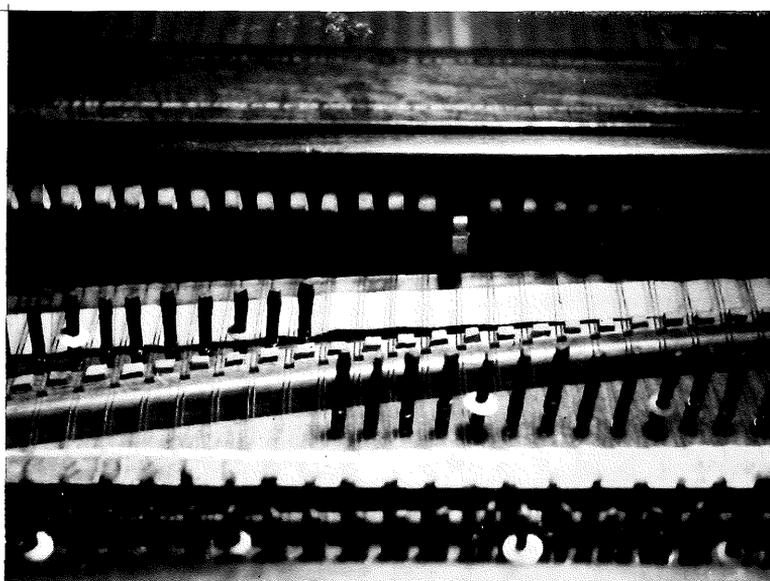
Merlin had to make a number of minor alterations in the harpsichord in order to adapt it to his piano mechanism. Most of these were involved with bringing the strings of each unison pair close enough to each other for both of them to be struck by the hammers. This necessitated some rearrangement of the unison strings and the jacks that pluck them, including the addition of a tuning pin in the treble that necessitated removing one of the original stop levers and replacing it with a new one in the bass. In addition, in order to permit the new tongues set into the front row of jacks to reach the hammers, the jackrail was moved back a half-inch. Finally, in order to permit the lid of the instrument to be closed with the piano attachment in place, a slot had to be cut into the lid and covered by a piece of new wood.

The description on the drawing accompanying Merlin's patent specification mentions a second

pedal that permitted the performer to produce crescendos by bringing the stops in one after another. This device is operated by the left pedal on the instrument shown. Unfortunately, the springs that must originally have been present to take the stops off again when the pedal was released and whatever means were provided for disconnecting these springs so that the hand stops could be used are completely lost. Only a couple of now-empty screw holes remain to indicate where the springs and the disconnecting mechanism might have been attached, and there is no evidence at all as to what they might have been like.

In answer to the obvious question of whether Merlin's mechanism really succeeds in turning a harpsichord into a piano, the answer can be only a qualified yes. When perfectly adjusted, the hammers do in fact strike the strings when the keys are depressed. However, the range of loudness that can be achieved is quite small, although it is at least as great as that which can be obtained on the square pianos of the period. On the other hand, the tone is a good deal better than that of most early squares, except in the extreme treble, where the hammers strike the strings so close to the nut that it is hard to get any sound whatever. On balance, what is surprising is not that so ingenious and complicated a mechanism fails to work better than it does but, rather, that any mechanism devised for so inherently improbable a purpose should succeed in working at all.

Edwin M. Ripin



**Fig. 2: Detail of Merlin's piano attachment. A single hammer is shown striking a set of harpsichord strings.**

## PATENTS, PERIODICALS, DIRECTORIES & MAGAZINES

In the October 1973 edition of the AMIS Newsletter, Robert M. Hazen pointed out the amount of valuable information to be found in musical instrument trade catalogues.

With this article we printed a list of catalogues that are a part of the collection in the Eleutherian Mills Historical Library. Since the publication of that Newsletter, we have received several additional sources of information which might also be of interest to our members. Dr. Robert E. Eliason, curator of musical instruments in the Henry Ford Museum, informed us of the following sources he has utilized.

**American City Directories**, micro-filmed through 1881 by Research Publications, Inc., P.O. Box 3903, Amity Station, New Haven, Conn. 06525, (203-397-2600). They will tell you what libraries nearest you have purchased the set.

**American Magazines & Newspapers**, Musical magazines are especially good for advertisements by early makers, and newspapers too, if you have the time.

**The American Periodical Series** by University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106. (313-761-4700) makes many of these early magazines available now in local libraries.

Patents are another excellent source. Although the U. S. Patent Office burned in 1836 destroying most patents before that date, many have been reconstructed from other sources and are available. Another excellent source for brief patent descriptions before and after 1836 is the **Franklin Institute Journal** published by the Institute in Philadelphia.

This writer has had some experience with patents and can highly recommend their use for research. The simplest and quickest method to receive patents is to send the title, number and date of the patent to the Commissioner of Patents, Washington, D.C. 20231, and include the required cost. (In 1972 the cost was 50 cents per patent, but with the rising costs it would be wise to write the Commissioner and request their free publication PAYMENT OF FEES.)

If you do not have a patent number and/or date, or even detailed knowledge of a patent, there are several methods by which you can locate this information. The first step is to find out what is available in a nearby library. Does it have copies of patents, the **Official Gazette**, the annual **Index of Patents**, the **Classification Manual**, microfilms of patents or patent numbers? In any of

approximately four hundred libraries you can read the **Official Gazette**, and in most of the libraries consult the annual **Index**. In many you will also find the **Classification Manual**. And in twenty-two large libraries you can read complete copies of patents. For a listing of the libraries mentioned above you can contact the Patent Office, or you can consult a book which might be in your own public library. This would be **The Inventor's Patent Handbook**, written by Stacy V. Jones, Dial Press, New York, 1966. Keep in mind, however, that those institutions mentioned above are the larger public and University libraries.

For patents issued in foreign countries you can consult Walford, A. J., **Guide to Reference Materials**, Vol. 1, The Library Association, 3rd. ed., 1973. This popular work, found in most public libraries, will tell the reader what patent abstracts or indexes are published for each nation.

The Newsletter will welcome any further information about research techniques for publication in future editions.

William Maynard

## KUDOS FOR THE AMIS MICHIGAN MEETINGS

Approximately sixty-five AMIS members and some forty non-members spent three exciting days (April 5-7) at the annual Society meeting hosted by the School of Music of the University of Michigan. Dr. Robert Warner, his colleagues on the faculty, the music students and the University of Michigan Extension Service deserve heartiest thanks for their very successful efforts in making the meeting an exciting experience for all. Dr. Robert Eliasson, Program Chairman, organized a program of papers interspersed with musical events designed to supplement the interests of the meeting. The new quarters of the Stearns Collection of Musical Instruments served as a backdrop for several performances using old and new instruments. The student gamelan ensemble of the University and a costumed student renaissance ensemble of instruments and voices that performed throughout the annual dinner were a unique experience.

## AMIS LOGO

The small design to the left of the banner head of this issue of the Newsletter is a reduction of the Society logo as it will appear on the cover of the new AMIS Journal. Specially designed for the Society by artists at the Stinehour Press in Lunenburg, Vermont, this classic design will also appear on Society stationery thereby coordinating all official printing activities by its presence.

## MODERN MAKERS OF OLD MUSICAL INSTRUMENTS

*(On November 9-11, 1973 the University Extension, University of California, Berkeley held a weekend conference devoted to the making of old musical instruments. Mr. Friedrich von Huene, a member of the panel of speakers, was kind enough to ask Mr. Ken Johnson to write the following paper for the AMIS Newsletter. Mr. Johnson is on the staff of the MUSICA ANTIQUA, 2530 California St., San Francisco, Cal. 94115. Any inquiries relative to this paper should be addressed to the author. Ed.)*

Instrument makers are, of course, human beings like the rest of us. But to me they often seem slightly mad, possessed of a divine quirk that gives them the power to transform mere wood, metal and gut into amplifiers of the soul's vibrations. Their work smacks of sorcery, but a sorcery to which I, too, am addicted. And so I went to Berkeley last November to learn something of this arcane craft whose artifacts give me such joy.

And learn I did. For Kathleen Lignell of the Extension Division at University of California had assembled a splendid panel of artisans at the Berkeley campus for a full weekend symposium: "Modern Makers of Old Musical Instruments". There were five 2½ hour sessions, each featuring a craftsman talking about his work, showing slides and other visual materials, answering questions, and conducting demonstrations of his instruments.

Leading off was Friedrich von Huene, woodwind maker from the Boston area. His presentation was an amplified version of what many of us have seen him show at various music workshops — an iconographic history of early wind instruments, with emphasis on the recorder. His discussion of recorder design and fabrication was interesting, but he avoided a deeply technical discussion, referring many questioners to Trevor Robinson's recent book on making woodwinds.

I think Friedrich had not anticipated how many practicing instrument makers would attend this weekend. When he asked for a show of hands, we were all amazed to see more than 100 persons indicate they were making instruments.

Saturday morning's session got down to the nitty-gritty as Lyn Elder, stringed instrument maker from the San Francisco area, led us through the intricacies of the hurdy-gurdy. With slides of his carefully drawn plans and cross-sections, he discussed all the major structural elements of the hurdy-gurdy, the fine tolerances involved in getting the wheel to touch the strings properly, and warned how everyone's first impulse is to run a finger over the wheel — and that's disaster. It destroys the friction surface needed to vibrate the strings. He then showed slides of later

hurdy-gurdies, and performed on two of his, one modelled on a medieval instrument, the other a baroque design rather more dulcet in sound, as would befit the ladies of the French court who favored it. Lyn probably rates as the world authority on the hurdy-gurdy, having studied, designed and built them for the past 7 years, and having toured Europe on a grant, measuring and adjusting hurdy-gurdies in the famous instrument collections, talking to modern players of the instrument, and collecting music for it. It was a rare treat to learn so much about an instrument unknown to me, but quite popular in earlier times.

If I were a struggling young luthier, Donald Warnock's lucid discussion of lute-making would have saved me years of experimenting to discover practical solutions to making a lute back that is strong, light, and beautiful. With the aid of a blackboard and good visual imagery in his descriptions, he painstakingly explained the techniques he developed over the years for each step, from making the form, through fitting and joining the staves, to removing the fabric used during glueing. After coffee break, Bob Strizich and Mary Cyr demonstrated several exquisite instruments made in Donald's Boston area workshop — lutes, baroque guitars, theorbo, and viols — playing a variety of pieces from tablature. During Donald's presentation I became keenly aware of the long struggle an instrument maker undertakes, surmounting many costly failures, to develop the techniques and gain the understanding requisite to producing a superb instrument. That he was willing to share his hard-won knowledge so freely is a testament to his humanity and his devotion to our Muse.

Sunday morning we convened in Hertz Hall, where the stage displayed the University's splendid collection of keyboard instruments. John Shortridge, keyboard instrument maker from Washington, D.C., discussed several types of harpsichords and clavichords he has built, and demonstrated a fretted clavichord he had brought from his workshop. As he showed slides of his various French and Italian style harpsichords and their prototypes, he discussed materials, designs, and building techniques. I especially enjoyed the pictures and discussion of a Jacquet harpsichord he copied. This rare 17th century French instrument is in the Ringling Museum at Sarasota, Florida, and was perhaps better suited for the music of the French *clavecinistes* than the late 18th century Taskin and Blanchet instruments.

Following the coffee break, Alan Curtis took the stage and gave a charming tour of the battery of instruments assembled there, including 3 organs, 2 clavichords, virginals, and 4 harpsichords (2 of them by Skowronek). For each instrument

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he chose a piece appropriate to it, and so we were treated to English, French, Italian, German, and Flemish music on their respective styles of instrument. The most unusual sound was the vox humana stop on their newly-acquired 18th century chamber organ from Bologna. A most enjoyable and enlightening demonstration.

The last session of the weekend dealt with the violin. Wilson Powell, a professor of physics at Berkeley, presented the results of his work on extremely accurate measurement of violins. This lively old man is obviously enamoured of the violin, and has worked hard to increase our knowledge of the physical principles at work in a great violin. He developed a simple magnetic device that allows him to measure wood thicknesses very accurately, and without taking an instrument apart. He has travelled about and measured violins by the Amati, Guarneri, and Stradivari families, plotting about 300 points on graph paper and then drawing contour lines. A very distinctive pattern of asymmetry typifies the carving of the top and bottom on the great violins, and Professor Powell explained how these areas of differing wood thicknesses worked to enhance the vibratory patterns of the instrument. The session ended with a young violinist playing the same passages on several violins in succession, as we voted on which ones we liked the best. Some of the instruments had been made by members of the audience, and a couple of these held up very well to a fine baroque violin from Professor Powell's collection.

Having revealed some of their secrets, the sorcerers retreated to their workshops to conjure more delights for us, and I came home invigorated with new knowledge. The free flow of ideas and information that characterized this symposium impressed me, and I hope this weekend will serve as a model for future conclaves of early instrument enthusiasts.

Ken Johnson

## EDITOR'S COLUMN

\*\* Ms. Jean Jenkins, Secretary General of the International Association of Musical Instrument Collections (IAMIC), wrote recently to inform us of the progress being made on their forthcoming publication *A DIRECTORY OF THE WORLD'S MUSICAL INSTRUMENT COLLECTIONS*. There are more than 800 entries thus far and a publication date will be set in the near future. The IAMIC Newsletter arrived several weeks ago and can be obtained by joining IAMIC. Membership fee is \$7.00 and should be sent to Ms. Jenkins at the Horniman Museum, London S. E. 23. Over 60

pages in length, the Newsletter contains information about IAMIC and their recent meeting in Copenhagen, museum reports, a membership list, and so forth. For this writer the most interesting section was titled *ANGLO-FRENCH TRAVELING EXHIBITION* (see discussion of the Catalogue in this Newsletter). Although information to be found relative to public collections varies from one museum collection to another, it is a good source to find what museums have collections of musical instruments. Entries include some bibliographic information relative to their published catalogues and monographs as well as a brief history of the collection. For the European traveler this is a must!

\*\* The International Clarinet Society is a nonprofit organization of teachers, students, industry personnel and all others interested in focusing attention on the importance of the clarinet. The ICS publication *THE CLARINET* is sent to members four times a year. Clarinet enthusiasts will find this Society and its quarterly a must. Further information can be obtained from Mr. Robert Schott, Kansas State College, Pittsburg, Kansas 66762.

\*\* The March 1974 issue of the AMIS Newsletter published information about the keyboard symposium at Brockport State University College. The dates of this meeting have been scheduled for October 3, 4, and 5, 1974. Interested members should write to Dr. Dowell Multer, Symposium Coordinator, Dept. of Music, State University College, Brockport, N. Y. 14420.

\*\* Lyndesay Langwill's book *THE BASSOON AND CONTRABASSOON* is at the printers for a second impression. His *INDEX OF MUSICAL WIND-INSTRUMENT MAKERS* is almost exhausted and a prospectus for a fourth edition is about to be issued.

\*\* The WESTCOAST MUSIC SOCIETY has sent to us their monthly publication which they hope will transform into a Journal. "A major concern of the journal will be to relay information of concerts, workshops, master classes and conferences up and down the Westcoast." This Society will also publish materials of interest to performers and builders of early musical instruments. The subscription rate is \$3.00 per year. Information can be obtained from WEMS c/o K. Lignell, 861 Arlington, El Cerrito, Cal. 94530.

\*\* The AMERICAN SOCIETY OF ANCIENT INSTRUMENTS held its 45th Annual Festival at St. Clement's Church, Philadelphia, on April 2-6.

\*\* The Music Department of the University of New Hampshire announces a Summer Workshop in Musical Iconography by Mary Rasmussen, Associate Professor of Music. Sessions will be held daily from June 10-14, 1974. For further information write to the University Music Dept. at

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Durham, N. H. 03824. (It is probable that this Newsletter will be mailed after June 15th. However, interested members may want to write for future sessions. Ed.)

### AMIS 1975 MEETING

The 1975 annual meeting of AMIS will be held on April 4, 5, and 6 at New York University. Program Chairman, Edwin Ripin, has plans for a pre-registration behind-the-scenes visit to the Musical Instrument Department of the Metropolitan Museum of Art and a visit to at least one of the major private collections in the New York area. Sessions planned include one dealing with mechanical instruments and one on instrument restoration. Anyone with suggestions for other sessions or with an abstract for a proposed paper should write to Mr. Ripin either at the Department of Music, New York University, Washington Square, New York, N. Y. 10003, or at his home, 61 Greenway South, Forest Hills, N. Y. 11375.

### SOME EXCITING RECENT BOOKS

Since space in the current Newsletter did not permit our usual detailed treatment of selected books in the "Books—Old and New" column, we would like to call attention of the membership to three exciting new publications not generally advertised. A sumptuous volume in German, *Alte Musikinstrumente* by W. Stauder, published by Klinkhardt and Biermann in Braunschweig will surely win awards as the most elaborate work of its type in years. It is of interest in that many instruments from private collections are illustrated. Edwin Ripin's *The Instrument Catalogues of Leopoldo Franciolini*, published by Joseph Boonin, Hackensack, New Jersey is a fascinating treatment of the instrument lists and catalogues of the 19th century Florentine forger and dealer in antique musical instruments. Since many of the great public collections contain Franciolini creations and his instruments still appear on the market, this study is a must for any serious collector and anyone dealing with collections. A third work entitled *Eighteenth Century Musical Instruments* is a beautifully produced catalogue of the combined Franco-British exhibit of last year. Many illustrations included are of instruments from private collections or from public collections not previously appearing in catalogues. The volume is available from Her Majesty's Stationary Office in London or from the Victoria and Albert Museum, London.

### MINUTES OF THE ANNUAL BUSINESS MEETING — 1974 AT ANN ARBOR

*(In the absence of William Maynard, the chair requested Dr. James Swain to serve as Secretary, pro temp.)*

The meeting was called to order at 4:30 P.M., Saturday, April 6th. In the absence of the Secretary, the minutes of the Boston (1973) meeting, as transcribed in the Newsletter, were accepted. As of March 1, 1974, the AMIS treasury amounted to \$823.39. Expenses for the Ann Arbor meeting would appear to be fully covered by registration fees and therefore, no debt was foreseen for the meetings this year. Legal fees covering incorporation have been half paid, the remainder being due the attorneys next year. The Membership Chairman reported that as of March 1, the total membership stood at 300. Members commented on the contents of the Newsletter and its value as a means of communication among the membership as well as a vehicle for obtaining new members. The Newsletter should receive input from members through short articles, a statement of activities and discussion of rare or unusual instruments including photographs.

Several items of New Business were discussed. A recruitment brochure and application form for potential members is currently being completed. Copies will be sent to the membership for distribution to anyone interested in the purposes of the Society. The Contemporary American Musical Instrument Makers Project under the direction of Susan Farrell is well underway and the first stage, the preparation of forms and mailing material, has been completed. Distribution and circulation of this material will start shortly. The membership will be informed of the progress of this effort through the Newsletter. The membership was shown a mock-up of the forthcoming AMIS Journal and the proposed annual costs were considered based on printers estimates. It was agreed that these costs could be met by raising dues, eventual sale of back numbers, advertisements and special contributions or grants. The recommendation of the AMIS Council that dues should be raised to \$12.50 per year to meet Journal costs and increased mailing and Newsletter printing costs was approved without objection. The dues increase will take effect January 1, 1975. Some discussion followed concerning exceptions to these dues and whether an increased institutional rate should be set for the Journal. The Council had recommended that there be a single membership fee that included the Journal and the Newsletter and that this be charged to individuals and institutions alike. The current Journal could only be obtained by joining the Society and all members, including students,

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would pay the same fee. After some discussion, it was agreed and acted on that a single amount constituting dues be charged to any and all members and that the Journal and the Newsletter could be obtained only through such membership.

A number of institutions had sent the Society invitations to meet in 1975. After some discussion, the invitation from New York University was accepted. The time of the meeting is to coincide with the previous years practice of the first two weeks of April. Edwin Ripin was elected as Program Chairman. The Society also received invitations for 1976 and it was agreed that it would be desirable to select a meeting site two years in advance since often this time may be required for adequate preparation.

There being no further business, the meeting was adjourned at 6:00 P.M.

Respectfully submitted,

James M. Swain, M. D.

## CLASSIFIED COLUMN

*Members may place non-commercial ads in this space. Twenty words will cost \$5.00 for one issue. Checks payable to AMIS should be sent with copy to the Editor.*

CLASSIC GUITAR—1936 Domingo Esteso rosewood classic for sale. Fine condition. John F. Dana, 86 Spring St., South Portland, Me. 04106.

ABRAHAM PRESCOTT church bass ca. 1835 for sale. Needs considerable repair. John F. Dana, 86 Spring St., South Portland, Me. 04106.

Back issues of the AMIS Newsletter and membership roster are available in a complete set at a cost of \$10.00. Payment should be made out to AMIS and sent to the Newsletter Editor.

WANTED: Music-writing pen with trifurcated nib. Prefer Osmiroid (the old-style). Stuart-Morgan Vance, 3718 Sallee Lane, Louisville, Ky. 40222.

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