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Elena Dal Corno

FOMRHI Quarterly

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FELLOWSHIP OF MAKERS AND RESEARCHERS OF HISTORICAL INSTRUMENTS

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FELLOWSHIP of MAKERS and RESEARCHERS of HISTORICAL INSTRUMENTS

Bulletin 35 April, 1984

Here we are, late as usual. With some reason this time: I was away for three weeks (very useful, too; see a short Comm in this issue on a medieval organ) and only got back on Monday. It's taken me till today (Friday) to get my desk clear enough to start.

What will delay it a bit further is the List of Members herewith; it will be done by hand again, which takes three or four days. Several of you have suggested using a word processor, but the trouble is that it would take me so long to learn how to use it, that this year's list would be even later. It would save time on next year's, of course, but that doesn't help now. Of course, if I could afford to buy one, it would be another matter; I'd have got used to it. If I can find a publisher who'll take any of the books I'm brewing, perhaps I can persuade Gwen that we could afford it, but till then....

Anyway, the List of Members comes with this issue. Do use it, do take it with you when you go away, and do make new friends in new places by getting in touch with fellow members while travelling; even if the instruments that interest them are very different from the ones that interest you, they're likely to be the same sort of people as you — otherwise they wouldn't belong to FoMRHI, would they?

Let me have any corrections or omissions, please, in time for the July Supplement. I try to get it right, but there are usually one or two errors and literals, and once, to my shame, I left somebody out altogether. If I ever get a word processor, I'll be able to be like everyone else and blame the computer, but till then it's my fault (except for the odd occasion when neither Margaret nor I can read your handwriting and we have to do a bit of guessing).

MAILING: We had a number of complaints from Airmail rate members about the October Q. Margaret checked with the post office (helped by a couple of your envelopes which had been sent back to me), and the result was that she had profuse apologies from the Salisbury Head Postmaster, who confessed that despite the clear rubber stamp saying ALL UP, they all went surface (she also got a small refund that doesn't help you very much since it would cost more than it's worth to send out cheques for 11½p or whatever). So now, although it'll make more work for her, and although the Post Office says that it isn't necessary, all Airmail Qs will have the blue Airmail sticker on the envelope. And I'll bet they'll make a mess of that, too, one of these days.

Dave Cantrell writes:

The recent quarterly (dated Oct. and postmarked 8 Nov.) was received by me on 29 Dec. Such delays do not bother me in the least, for otherwise I would have had an airmail subscription. However, what does annoy me year after year is receiving the plea, at so impossibly late a date, that renewals materialise on the other side of the Atlantic before 1 Jan.! The enclosed cheque has been sent promptly and by airmail, and yet it obviously will not reach you until after the deadline.

The solution to this particular problem should be remarkably simple: Announce the subscription rate for the coming year in the JULY bulletin. Then those of us who receive the quarterly by tortoise will (hopefully) know by Sept. the amount to be sent, to whom, etc.

JM replies that I'm afraid it's not so simple as you think. A new subscription rate has to be agreed by the Fellows, which would mean sending out a Ballot in April if the rate were to be announced in July. It's difficult enough to work out how we're doing financially in June, for a July Ballot and October announcement; it would be quite impossible to do it in March. Anyway, the reason that the Invoice you get has the

January 1st date on it is that your subscriptions run for the calendar year. In addition, the majority of members do get it in time to send it back by Jan.1st (even if they don't all do so; see the opening of the last Bulletin), and we really can't be expected to have a different version of the Invoice for those who live far away but prefer rowing boat to airmail; if we did, what date would we put on it? Jan.10th for America, Jan.20th for Australia, 23rd for Japan? No, you subscribe for the year from January 1st to December 31st (you get an extra day for your money this year, too), and so it will go on saying Jan.1st.

ACCOUNTS: Margaret is much more efficient than I ever was, and she has sent me a Balance Sheet for 1983:

Advances in 1982 for 1983	£ 1122.14	
Income 1983	4254.25	
Advances in 1983 for 1984		1936.06
	3440.33	
Expenditure and deductions		3715.90
	(275.57)	
Accumulated surplus	1347.20	
Balance in hand for year	1071.63	

Expenses:	Postage	1149.94	
	Bank deductions	41.79	
	Stationery	16.79	
	Carriers	167.18	(getting Qs from printer to Margaret)
	Envelopes	165.27	
	Printing, etc	2147.19	

Income: £910.64 was new members, many of them a result of the Horticultural Hall Exhibition, both subscriptions and the back issues they bought.

It may interest you to know that the printing cost of Q 34 was 96½p per copy. Also that the printing cost of the Renewal Reminder, which went to all those who had not renewed by the time 34 was ready, was 4½p, which is the cost of four pages of the Q; when you add the cost of an envelope and a stamp, you see just how much sending these reminders cuts into what we can print.

Of the 1984 income received by 1st March, £85.76 was donations for members who can't send money out; there are 19 of these at the moment and, as I said in the last Bulletin, we are very grateful for so much help.

FoMRHIQ: David Crookes writes (when sending his renewal to Margaret):

Comments: Keep the Q exactly as at present, but try to approach the thicknesses (e.g. 80 pages in April 1980) of earlier days. That means plenty of pressure on readers of the Q to become writers (what about getting JM to write a really rude paragraph in the next bull.?) and probably raising the subscription, which surely no one would mind.

JM responds: The last Q was 84 pp, so I won't be rude this time. This one looks a bit thin, unless Djilda has some things up there, but we will see whether David's Comment has any effect on contributions for July before I say much. One thing I will say; I had a letter from one member saying that he is a non-contributor, and then making some very useful comments, which emphasises soething I've been saying for a long time: you've all got some useful comments to make.

FURTHER TO: Comm.483. Several members have commentd on Paul Gretton's review of Overton's Der Zink, all so far agreeing with what Paul said. There has been another book recently on the same subject, and Paul said that the second one was very much better and asked me if I could get a copy for review so that he could compare them in the same Comm. Unfortunately, the publisher of the second one would not send it.

Comm.500: David Van Edwards says that he has"had a test strip of varnished wood since 1980 and it still looks fine, but I use pine resin collected straight from the tree Pinus nigra (broken branch ozzings etc, no tapping!) Otherwise the method as for Fulton and no problems, one doesn't even need a thermometer, the exothermic reaction sets in at exactly 150°C and is not violent though I wouldn't cook it indoors."

Comm.506: Wesley Wadsworth writes:

The article (COMM. 506) in the January 1984 issue on "Eighteenth Century Success of Copal Varnish" by E. Segerman, was very interesting and informative to me as I am interested in copal and amber varnishes for violins. E. Segerman stated he did not look for or find an author. After reading this article, I rembered the name "Martin" from Ed Herron-Allen's book, "Violin Making, As It Was And Is".

Chapter X, "The Varnish", page 177, reads as follows (in part), "It has been said that Stradivarius and his predecessors varnished with amber, but strong evidence against this is brought by the fact that the secret of dissolving amber and hard copal was not known until 1744, when a letters patent for the discovery were granted to one Martin. His operation was to fuse amber and hard copal by dry heat, and dissolve it in boiling oil, which was diluted with an essence raised to the same heat before it was added. This operation was, indeed, invented in 1737, but as this was the year in which Stradivarius died, he could never have used it, much less his predecessors, as stated by Otto, and besides, a varnish so compounded would be much to hard to use on violins for the reasons before stated". (End of quote).

Ed Herron-Allen lists in the Appendix, some 50 English texts as references, and another 101, French, Italian and German texts, but apparently never heard of, read, or considered the information contained in the 1847 works by Sir Charles Lock Eastlake, formerly titled, "Materials for a History of Oil Painting", now published under the title of "Methods and Materials of Painting of the Great Schools and Masters". (2 vols.)

The use of amber for making varnish, dates back to the 8th century, when it was made and used to cover artists paintings (both oil and tempera). In fact, these varnished were primarily developed to fill the need of the artists, and not for the preservation of wood. Amber was available in Italy from local sources, and much came from Germany, where, in earlier times, it was used to a greater extent than in Italy. There are many formulas or receipes for making varnish using amber, dating back to the 14th and 15th centuries.

Comm.517: Bob Barclay tells me that the Anatomy of an Exhibition now costs $12.50 Canadian.

Comm.521: Luis Pereira tells me that the clavichord which Bernard Brauchli played on that recording is a copy by Eckehart Merzdorf of an instrument by Manuel do Carmo of Porto, made in 1796, a very late instrument influenced by German techniques. Luis has built copies of an earlier instrument in the Lisbon museum and has plans available if anyone else would be interested.

A Comm. herewith on the Boehm flute: Ludwig Böhm is a descendant of the inventor, and although not (yet, anyway) a member of FoMRHI, thought that we might be interested. The Boehm flute is more modern

than most things in FoMRHIQ, but it's still historical, especially so far as its origins are concerned, so I thought we should print it; I hope that Djilda agrees.

Another Comm. Herewith: Anonymous and untitled, which is my fault; I obviously shoved it in the file without its covering letter (I assume that it had one originally). I try not to do this, but it does happen, and it's a great help if you can put your name anyway on the back, and even more help if you can follow majority procedure by starting:

FoMRHI Comm. (leave Djilda to add the number) Your name

The title

The text, single spaced from here on, but leave either 1½ or 2 spaces between the FoMRHI Comm line and the Title line and between the Title and the first line of text. Some people prefer to put their name at the end, rather than the beginning, but speaking as a reader, I prefer it at the beginning since my usual reaction is 'who said that?' and it's easier to see at the top than turning to the end. Besides, it helps the reader who doesn't want to read any more of JM's awful Comms! It also helps if give it a title; if you don't, Djilda has to, and sometimes you may like the result, and sometimes you may not. At least twice she was defeated and one front pagehas a Comm. titled ? and another just has an empty line; either makes it difficult for people to find the article when they want to hark back later.

BATE NEWS: Four recent acquisitions:

Stanesby jr flûte d'amour. This is an unique instrument; Stanesby is not otherwise known to have made a flûte d'amour. It has no known provenance; it appeared in Christie's a few years ago, went abroad, came back here, and was purchased with considerable and generous help from the National Heritage Memorial Fund. It is boxwood and ivory with a silver key, stamp 4 (see GSJ XIII) with a flat sign and B below; the stamps when aligned turn the embouchure well in as usual. The overall length is 75.5cm and pitch is B flat at 415. The embouchure appears to have been enlarged, and if it has the original pitch might have been 409. Stanesby jr's working dates seem late for such a pitch, and I wonder whether perhaps father and son divvied up the work: Dad made oboes and recorders, and Son made traversi (adding a few oboes and some recorders after dad died); this could be one explanation for the total absence of Stanesby sr flutes. Anyway, it's very exciting to have it here, where it joins Philip's oboe and my ordinary flute.

Cahusac sr 2-key oboe. This was one of the best instruments in James MacGillivray's collection and has come to us, with the aid of the Hulme Surplus Fund, at, very genrously, the same price that it went for at the MacGillivray sale. Several people have said that it's one of the best 18th century oboes that they've played.

Samuel Allen double-bass bow with a presentation inscription to H.G. Hill dated Dec.22nd 1884. Some of you may have seen the short article I wrote in the March Strad about a Retford tubular bow. Willy Kern-Simmen wrote to me with some comments on it from Berne, and asked if we would be interested in this bow. I replied that of course we would, but that we had no money (the two above cleaned us out), and was astonished and delighted when I got back here on Monday to find it waiting here for me as a gift to the Retford Memorial Collection of Bows. It is a very fine and well-made example of the English 'meat-axe' type, with a fixed frog screwed to the stick. The length is 68.5cm, frog hair 53.8cm, weight 140g, width of hair 8mm, distance from hair to stick at the frog 5cm. We are very grateful to Mr.Kern-Simmen.

Soprano Trombone: This I owe to one of our members, who spotted it in

a local antique shop at a reasonable price to take a chance on, and bought it for me and posted it down. It's anonymous but nice, in excellent condition, with tuning slide controlled by screwed rod in the front bow. When I've got this lot off, it will go on show and mine can go home.

Plans: We are beginning to accumulate some proper plans (Listed elsewhere in this Q, with A5 samples of some or all, depending on how much space Djilda feels like giving it). Some are due to the kindness of people who come to measure and who produce a finished plan instead of, or as well as, the rough drawing and list of measurements that everyone leaves. Two are part of a larger scheme that I hope will come to fruition. Ken Williams is trying to get a grant from the Australia Council to come over here for nine months and draw as many plans as possible during that time for the benefit of makers in the Antipodes who can't get at original instruments (and also, of course, for our benefit). He drew two samples from measurements we already have, which the original measurers have approved. The trouble is that we have no funds to pay someone to draw plans (I have already had to refuse offers to draw plans from other members because I couldn't pay for it), but if he can get this grant, we'll all benefit.

Oboe Weekend: Our next Weekend will be November 24/25, with David Reichenberg and as many of the London Oboe Band as the money will stretch to. Like the Horn Weekend (May 12/13 and thus too soon to remind you of it unless this gets out faster than usual), it will have to be paid for (£15 for the whole weekend; £10 for either day). I hope these two are successful, because if they aren't there won't be any more. The Music Faculty has agreed to risk a loss on two, to see if we can run them successfully without the grant which terminated last summer, but they can't carry them indefinitely (in fact they do pay quite a lot of the cost: printing, advertising, mailing list postage are all carried by the Faculty; the £15 covers just the fees of the speakers).

QUERIES: Gerhard Janke asks if anyone can tell him how to make an "embossed seal (or wood-stamp or die ? It's the problemof technical terms and dictionary) to stamp in the maker's name and emblem onto woodwinds".

Olov Gibson writes:

I have noticed the following concerning the making of oboe reeds for historical oboes.

It is nowadays the practice that the reed cane (Arundo donax) after cutting, must be matured by long and careful drying in the southern sun for two - three years.

I have been forced to put this in question, when the matter is to make reeds for historical oboes (before the middle of the last century). Henry Brod writed the following in his "Méthode pour le hautbois" (1826): "Le roseau doit etre coupé à l'époque de la maturité des fruits, on ne peut s'en servir que pendant deux ou trois années passé ce temps, la sève étant desséchée les anches qu'on en ferait seraient loin d'avoir un aussi beau son que celles qui seraient d'un roseau plus récent."

My own experiments with both fresh and matured canes has showed me that it is easier to make oboe reeds from a relatively fresh cane than from a cane which has been dried. It is e.g. not necessary to soak the cane in water before bending it over and tying it on the staple. Further, an oboe-reed made from a fresh cane is in my opinion more flexible and therefore it is more suitable for these old oboes wich did not have our modern oboes developed mechanics.

Could anyone interested help me to find any source that proofs that I am wrong, that is, that the oboe players already during the time of Bach, Graun, and Beethoven were using dried cane for their reeds?

John McIntyre is looking for shawm plans. I suggested that he write to Nürnberg and Berlin; can anyone suggest anywhere else that would be worth trying? So far, all that he has been able to do is copy a Körber (his own comment is 'ugh!') and use Tony Baines's rough dimensions in History of Woodwinds. This is the sort of trouble that they have in distant places like Australia, and precisely why I hope that Ken Williams will get his grant to come here and make plans. Meanwhile, if anyone can help him, it would be a kindness.

PLANS: Lists herewith of RCM plans and, as already said, Bate plans. Also a reminder that Luis Pereira has plans of a clavichord on offer (see above under Further to Comm.521).

MUSEUMS: The Royal College of Music Museum will be closed until some time in October or with luck September; they have building operations on the new Library and its staircase. Elizabeth Wells will doubtless let me know as soon as she can when they are re-opening, but if you need to know sooner, she's in the List of Members; bear in mind that it is due to building operations, and I've never known builders keep to a date yet.

The Ulster Folk & Transport Museum is putting on an Exhibition of The Flute and Ireland : Our Musical Heritage (why with that title they want to borrow half a dozen flutes from the Bate, I don't know, but they do) from 18th May to 23rd July (mindyou, they may not get the Bate instruments; I'm still waiting for details, and we're getting a bit close to 18th May; this is the reverse of the Anatomy of an Exhibition - see Comm.517 - experience. Then they had trouble with the lending museums not answering letters; this is the borrowing museum not answering them). If you're in the area, the museum is at Cultra Manor, Holywood, Co.Down (I think not far from Belfast) and it should be quite an interesting exhibition of flutes and recorders.

I had suggested to Len Stanners that he might write a Comm. on his recent tour round American and European museums. He has decided not to because he was so rushed, trying to do so much, that what he wrote would not really befair to any of them. He made a couple of general comments: one thelack in many cases of catalogues or even check-lists. Catalogues, as I've told him, is a question of both time and money; compiling a good catalogue is a long, hard slog, and in many cases there is simply not the time to do it (sometimes also not the expertise, of course); even if one does do it, printing will cost several thousand pounds for a decent catalogue, and even though one will get it back over the next ten or so years, there may never be enough in this year's budget to pay for it; most museums are constitutionally barred from taking out a mortgage or a bank loan, and grants for this sort of purpose are getting a bit thin on the ground. However, we ought to have typewritten check-lists at least, and that's certainly one of my jobs over the next year or so (provided, of course, that the powers that be agree that a FoMRHI style Supplement to Tony's Catalogue is consonant with the dignity of the University; they might not, in which case we might be stuck if we can't get money to print it properly). This is something that any museum ought to be able to find the money and time to do, though.

His other point was the importance of making appointments in advance with the curator. It is, of course, obvious, but at the same time difficult to do on a long tour. Unless you can plan a tour of the

sort that the old joke refers to (It's Wednesday, so this must be Rome), it can get difficult. All the same, without appointment, one can't be sure of access, nor even that the museum will be open (with great regret I had to refuse Bathold Kuijken a visit the other day: I was away, and that was that). One is often extraordinarily lucky, of course; I've dropped into museums often enough just as a casual visitor and then seen something interesting, and been lucky enough to find the curator both there and free and willing to give me time. But you can never count on it.

EXHIBITION: The Guild of American Luthiers is holding its ninth Convention/Exhibition at Guilford College, Greensboro, North Carolina August 2-5. You can only exhibit if you're a GAL member, but you're welcome to join (write to 8222 S.Park, Tacoma, WA 98408). For information on the Convention/Exhibition, write to David & Peggy Sheppard, 708 S.Elam Ave, Greensboro, NC 27403.

ADVERTISING: The Guild of Master Craftsmen is producing a new edition of the Guide to Restorers. If you want an entry in it, if you say that you are a member of FoMRHI you can get it for £6 instead of £12. They would like to have as many entries as possible, to make it useful to the public. Their address is 170 High Street, Lewes, E.Sussex BN7 1YE, and because their deadline will be past by the time you get this, their phone number, in case they'rebehind, is 07916-77374.

Angelo Zaniol says that he has been advertising FoMRHI by showing the Q to his students at his University, and certainly we have gained a number of Italian members recently, which may be a result. Many of you can do the same; show Qs to students, colleagues and friends. Some of them may join, which benefits us all (but let the others read it, even if they don't join!).

COURSES: I've already mentioned the Bate Oboe Weekend (see p.6).

The Commune di Milano is planning a day course on the Restoration of the Instruments of Popular (ie Folk I think) Music on March 18th next year (at least, one page says 1985 and the other 1984, but as it was sent out on 1st March this year, I assume that the course is next year). If you're interested, write to Marco Tiella (in the List of Members); he, J.H.van der Meer, Roberto Leydi, Diego Capitella, and Febo Guizzi are running it.

Rather different, the Commonwealth Institute in London is running an African Music Village Course, July 19 to August 4 this year, with workshops on making as well as playing African instruments. If you are interested, write to Ghislaine Boddington, Arts Department, Commonwealth Institute, Kensington High Street, London W8 for more details (and that part of the form has July 22nd to August 4th!). The course costs £60 per week, including accomodation in a Youth Hostel.

NEMA: The National Early Music Association tried to hold its AGM on 14th January, as I told you in the Bulletin (p.11). The notice was well under that in the rules, so I put in an objection, not to be awkward, though I'm afraid that they may have taken it that way, but because any decisions taken at the meeting could have been invalidated later because of lack of statutory notice; it's safer to scrub the meeting than to have its decisions cancelled later. Anyway, they recalled the meeting for 22nd March, and unfortuntely I was away by then, so could not go. They did hold a General Meeting and reported on the work done. They have only 42 members, which is a pity; there is need for a National umbrella organisation which can speak for us all to bodies like the Board of Trade (they managed to get a representative sent to the last Boston Exhibition to see if grants could be made available to exhibitors; they failed, but at least they got someone to go), LEAs, Examining bodies and other educational organi-

sations (it looks as though they may be making progress there) and so on. Most trades in this country have a pressure group that can lobby for them whrever lobbying may be useful, and this is what NEMA can do, but it can only do it if it can say that it has the membership. One problem is the subscription; it's higher than ours (£10 if I remember rightly), and they made the mistake, which I spoke out against very strongly but to no avail, of having a much higher institutional membership, which means that organisations such as FoMRHI, GalpinSociety, and so on cannot afford to join because we cannot spend our members' subscriptions in that way (a tenner wouldn't hurt; but £30 or whatever it was is another matter; it's different for a playing group). Another problem is the old vicious circle of 'let's see what they achieve before we join'; well they are achieving something, especially in the educational field (and that's where the future customers for your instruments will come from), and it is time that people began to join. They've got some half-baked ideas about meetings (there was a wine-tasting - what's that got to do with Early Music? - and what was really a social meeting here), but the reasons for joining is what their Committees are achieving on behalf of us all. I have tried to get hold of the Chairman, John Kehoe, to ask if we can reprint the report of their Educational Committee; if I succeed, and if Djilda has room for it, you'll find it here. Meanwhile, if you want more information, and if you would consider joning, write to Gavin McGuire, 42 Woodstock Road South, St.Albans, Herts.

GALPIN SOCIETY: Their AGM will be here on July 8th, and I look forward to seeing them (and as many of you as are members - you all ought to be - see Book News in this Q) then.

The SUMMER: I don't yet know what my plans will be; I shall probably be here for some of (certainly till after the Galpin AGM) July and maybe August and September; I am only likely to be away for two or three weeks all told. So, if you're planning a visit, let me know.

NEXT Q: Deadline is 2nd July for your Comms (have another look at what David Crookes said at the bottom of p.3), Bulletin notes, queries, responses, etc, and for any corrections to the List of Members.

As the lady once said, introducing some fairly pseudo folk dancers at the Albert Hall: It's spring, and everybody is happy.

Jeremy Montagu

BULLETIN SUPPLEMENT by Eph Segerman, guest editor

Djilda is very busy with running NRI and the kids, and gladly accepted my offer to do this Quarterly.

Response to Paul Gretton's Comm 502: His point 1) is largely covered in my editorial in the Bull Suppl 34. His point 2) is an interesting one. There are many leading makers and even some instrument researchers who are not members, and I've been trying to find out why.

As Paul mentions, some complain about the lack of authority in the Quarterly, citing articles of low quality. Our lack of editorial insistence on quality of content and style has led to the inclusion of some pretty poor stuff (as well as some very good stuff). The 'quality' journals keep a much higher standard in style of writing, but as for content, I've seen some pretty poor stuff there as well. I welcome the poor stuff, hoping that it will stimulate better and informative responses , as it often does. Many people too readily expect authority from the printed word. I hope that our non-maintenance of quality standards will help them grow up as readers and learn to be able to extract useful information from amongst the rubbish. The trust that an author has done his scholarshop properly so that one needs only to read and accept his conclusions is a trust often not well founded in our field, no matter how authoritative the journal seems to be. And if the non-member is not open to new information unless it is predigested, guaranteed to be true, and attractively packaged, then I see why our quarterly would be of no use to him.

Another reason for non-membership that has been expressed to us is a non-willingness to accept our policy of free giving of information. This is an honest reaction and perhaps a naive interpretation of our policy. As Paul implies, the reluctance to divulge knowhow gained by much effort to potential competitors is not uncommon amongst members (and even Fellows). I'm very glad that such insecurity is not more widespread than it is.

I see no reason why we should change so as to attract to our fold people, no matter how prominent, who are non-members for any of the above reasons. Their non-membership reflects their inadequacies at least as much as it reflects ours.

Many makers are not really in sympathy with FoMRHI's objective of exploring deeper levels of historical accuracy. They do whatever research they do to establish models on their own, and while their customers seem to be satisfied with the level to which they have captured the historical spirit, they are much more concerned with improving workshop efficiency and improving the acceptability of their instruments to potential customers. Though historical factors might be helpful here, these makers are happier being guided directly by customer responses, using their own imagination and judgement to solve the problems raised. If customers ask for more authenticity than the maker usually offers, he could readily give them what they want. But they rarely ask for this, so why bother giving them what they don't seem to want? Some of the most commercially successful makers respond in this way and FoMRHI could possibly seem to them as a collection of people still seeking the success that they have already achieved. So to them, membership could appear to be not only useless but also a step backwards.

I can't think of any way that FoMRHI can serve its members the way it has been and still become more respectable. We could offer new services to attract the apparently self-sufficient successful maker. Suggestions as to what we can do (and who will do it) would be welcome.

As for Paul's point 3), we would gladly accept a Comm on a synthetic spray-on soundboard lacquer if it carefully compared this soundboard finish with an authentic one. What we are not in sympathy with is makers doing things in a modern way without even considering the authentic alternative. And the editor is usually competent enough

to judge whether this attempt has been made. If he feels unable to judge this, he'll get advice from a specialist in the relevant field. If members feel uncomfortable about what they are missing because of the censoring zeal of the editor, I see no reason why we can't list rejected Comms in the Bull Supp. None were rejected this time, and one was last time because its basic premise contradicted accepted physical theory (it will be accepted if the author insists).

Finally, I feel just as strongly about Paul's wanting to limit discussion about authenticity as he does about our limiting the inclusion of contributions to the Quarterly which show no consideration of historical factors. The editor should of course not allow continual repetition of the same points, but we would like to encourage members to express their views on this most important issue.

Removal of "Guitar" Equipment from Old Lute Bodies

Concerning Jeremy's very good Comm 501, there is one point on which I would like to take issue with him. He states (Quarterly 34 p18) "One could approve the removal of such accretions as a guitar neck and belly on a Laux Maler lute back...". Is this not a violation of the principle of leaving an instrument in (or if restoration is really necessary, restoring it to) the latest state at which it was an accepted part of a performing tradition? Why should a 16th century lute back being used for a guitar be any less worth preserving intact than a similar back used for a baroque lute? Is not the guitar adaptation of a lute or a 'cello adaptation of a gamba of historical interest? The problem, of course, is that an old instrument in its original state presents a more educationally direct and dramatic display. But could not the display feature how parts of old instruments have been able to survive the ravages of changing fashions by being adaptable?

A considerable fraction of the lute backs that have survived to recent times have been as guitars, so the conversion must have been considered successful in its time, and not just isolated experiments that did not impinge on the musical culture. We can be far from sure that some new guitars were not made with new lute bodies.

Guitars with lute bodies can be seen in early pictures. One is illustrated hanging in the upper middle area of the famous illustration of an instrument-maker's workshop, Fig 7, Pl XVIII in the Lutherie set of plates in l'Encyclopedie. A 17th century example is seen in the painting by Evaristo Baschenis at the Accademia Carrara in Bergamo (reproduction in Pincherle). We need to keep reminding people in charge of original historical instruments to respect what they have, even if it is not what they expect, prefer or understand.

Current History: Some day, the history of the modern early music movement will be written. Part of that history is trends in instrument design. It is clear that the popularity of design features in early instruments have been changing much more rapidly than in modern instruments and I'm sure that different people active in the field will have different perceptions and experience of what has been happening. Future historians will find all of these of considerable value. I therefore invite Comms on this subject. Makers can report the characteristics of the various models they have made and how these related to what their customers were looking for at the time. More general views of this topic would also be welcome. I've included a Comm in this issue giving examples of recent developments as I see them and how I expect them to continue. My view, that there is a steady movement towards more authentic design, may not be shared by all of our members. My perceptions of trends may well be argued with. Let us hear what you think on the subject.

Correction: In the Bull Supp of the last issue, an error crept into the typist's transcription of my scrawl that I didn't catch in proofreading. The title of the book by Lloyd and Boyle is "Intervals Scales and Temperaments". I apologize if this has misled anyone.

FoMRHI Book News — Jeremy Montagu

Angelo Zaniol has sent the latest issue (no.9) of Liuteria. He asked me to review it, but I don't think my Italian is up to it (if anyone would like to do so, let me know). It contains the second part of an article of his on making good copies of historical recorders, which looks important (see also his Comm on the subject in this issue; he wrote it as a Further to, but as it runs to three pages, it's better as a Comm). There's an article (by Licia Sirch) on the Iconography of the Cittern, which has some pretty pictures but doesn't look as though it adds anything to Winternitz's paper at the 1951 Galpin/Music Librarians Conference (reprinted in his Symbolism book) and anyway confuses the issue by including English guitars which, like Portuguese guitarras, are not citterns (despite what they say in auction catalogues). There is also an important article by Pierre Abondance on the restoration of the Jacquemart-André museum vihuela, with a lot of detail photographs, internal and external. Angelo's and Abondance's articles certainly look worth having, if you can read Italian. The publishers are C.E.L. Cooperativa Editoriale, Liutaria Soc.Coop.A.R.L., Via Radaelli 4, 26100 Cremona. Subscriptions are 20,000 lira (from abroad; 16,000 in Italy) and single copies (I think) cost 8,000. Their GIRO number is 10216265.

Galpin Journal XXXVII has just appeared and includes, as always, a number of important articles. I know that a number of you never see it, and I can never understand why not. This is the basic information on which everything else is based. FoMRHI does a good job, I know, but it wouldn't be the end of the world if it folded; if the Galpin Journal packed up, it really would be serious. Anyway, this issue includes articles on an early vello in original state (Eric Halfpenny) which although severely damaged is still informative; the only three-piece (Hotteterre type) flute so far discovered in Italy (Filadelfio Puglisi - he dropped out of FoMRHI some years ago, but had the sense to keep up the Galpin subscription); an extremely interesting and cat-among-the-pigeons type article on bent plates in violin construction (Athanas Lolov), which raises the question whether La Messie might be by Vuillaume rather than Stradivarius; early clarinet fingerings (Albert Rice); basset-horns versus clarinettes d'amour (Richard Maunder), cast-iron frames, ballad horns, transposing harpsichords, late curtals in Spain, early shawms in India, reed makers, Bressan, crumhorn bores, left-handed Bressan recorders, etc, etc. If you don't belong to the Galpin Society, you should (Secretary is Pauline Holden and her address is in our List of Members); subscription is £10 in UK, £12 abroad, less 10% if you pay by bankers order or through an agent, or less 50% if you're a full-time student (but plus 25% if you want joint membership as a couple, which is a swindle as all you get is the addition of & Mrs in the membership list if they ever produce one - the last was 1981).

Journal of the American Musical Instrument Society vol.IX has also just appeared (about time too, it's the 1983 issue, but they are catching up now). An article on the Bassoon in 17th century chamber music (Brian Klitz) seems to be about curtals; it's by no means clear which type of instrument he's writing about; Robert Eliason continues his work on Catlin and his contemporaries, with a lot of information; Ralph Dudgeon establishes many facts about the life of the inventor of the key bugle, including the way he spelled his name (Haliday, not Halliday - damn the man; I'm going to have to retype my labels), and Bernard Brauchli has a long article on Thon's clavichord material in his Ueber Klavierinstrumente of 1817, with a fair amount of constructional material. Again, if you're interested, the person to get on to is in our List of Members: Margaret Downie.

Also just appeared is the February issue of Early Music, which I've

not had time to look at yet (I said 'just appeared' but it could have been any time in the last four weeks, since it was waiting for me when I got back), but which includes what will, with any luck, be a controversial discussion on authenticity and its limits, an article on Renaissance slide trumpets (did they exist?), on the larger flutes such as our new Stanesby d'amour, on clarinet reed positions (upper or lower lip) plus several articles on music; instruments have done rather better than sometimes.

Presumably you know that there is a new Oxford Companion to Music in two volumes, edited by Denis Arnold (no longer a one-man job like the original Scholes). They've not sent us a review copy, so I'm not going to say anything about it except that most of the instrument articles are by Anthony Baines, and should therefore be OK.

Contents of Bouwbrieven Nr31 (Nov.1983) and Nr32 (Feb.1984)
Paul Gretton

31.2.7. Charles Stroom recommends various publications on woodworking available from the Taunton Press, 52 Church Hill Rd, Box 355, Newtown, CT 06470, USA. The same publisher also has a periodical, Fine Woodworking, which appears every two months and costs $34 for two years.
31.8.2. Building an acoustic jazz guitar, part 2. (Eph's been waiting for this so he can fit the neck.)
31.8.4. Corrections to article 30.8.1. (converting cents to Herz) by Peter van Marissing.
31.8.5. Making blocks for recorders, by Charles Stroom. (3½ pp)

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32.8.2. Making your own purfling router, by Fried Manders.(With detailed drawing.)
32.8.3. Answer to 31.8.4., by Charles Stroom.
32.9.1. Tuning a traverso, part 1, by Jan Bouterse. Detailed!
32.9.4. "The Meander", an alternative to the rackett, by Leen van Assendelft.(Has remarkable similarities to David Crookes's "Lunatic Crumhorn" as described in FoMRHI Comm.507.)
32.9.6. A quick method of making hurdy-gurdy tangents, by Ed van Weerd.
32.10.1. Delrin tangents for hurdy-gurdies are available from CAMAC, c/o Thierry Gautier-La Richerais, 44850 Mouzeil, France, tel.(40)772338. Also other spare-parts for h.-g.
32.11.8. The Cantigas Project. The Holland Early Music Festival in Utrecht (late August) includes a Cantigas Project, for which Bouwerskontakt intends to reconstruct as many as possible of the instruments shown in the famous set of miniatures. Builders are invited to get in touch with Bouwerskontakt, Vereniging voor Huismuziek, Utrechtsestraat 77, Postbus 350, NL-3400 AJ Ijsselstein, The Netherlands for further information. Colour photos are available of 46 of the miniatures. Prices are Hfl 2.00 (9x13 cm), Hfl 9.90 (13x18 cm) and Hfl 15.90 (18x24 cm). (You should state very clearly just which miniature you want a photo of -- describe it. I say this because the list given in 32.11.8 is often vague, and it doesn't give folio numbers.) IMPORTANT: interested builders should also get in contact with the musical director of the project and organizer of the festival, Jan Nuchelmans, Obrechtstraat 63, NL-3572 ED Utrecht, tel.030-713523.

Nema
NATIONAL EARLY MUSIC ASSOCIATION

EDUCATION SUB-COMMITTEE

1983/84 report

The NEMA Education Sub-committee was set up at the second meeting of the present outgoing Council on 14th April 1983, consisting of Robin Atter, Simon Hill, Madeleine Inglehearn and Terry Pamplin, and has since met 6 times. Our first need was for information on the existing state of affairs in the educational world, and we decided to attack the problem on all fronts at once; schools, universities, colleges of higher education, music colleges and examining boards. Consequently, a circular letter was drafted to accompany a copy of the Early Music Journal report of the 1980 Education Conference, and this was sent to 120 LEA music advisors, 35 university music departments, 29 colleges of higher education, 16 music colleges and 23 examining boards. The response rate from LEA's was just 10%, although we had over 20% response from universities and colleges. We fared better with the music colleges and examining boards - most of the music colleges replied, as well as all the GCE boards and 13 of the 16 CSE boards. In view of the disappointing LEA response, some 80 LEA dance advisors were also circulated. This produced replies from 15%, bring up the overall LEA response to nearly 20%. In addition, by dint of gleaning information from other sources (including searching through published prospectuses, as well as circulating fora and through personal contacts), we have begun to build up a picture of the present state of early music in education in Great Britain, and a sorry one it is! There seems to be little appreciable change from the position in 1980, and few if any of the recommendations made then seem to have taken effect.

The picture from the LEA'S has been somewhat mixed. Those with a good showing in early music seemed to rely almost exclusively on the achievements of one school (and therefore of one enthusiast on the staff of that school), but those achievemnets were of a high standard. However, at the opposite end, a cry often heard was, "We would like to do something, but do not know where to start". The next most common plea was lack of funds to buy instruments and scores. Finally, there was the lack of incentive of recognised Grade exams to act as a stimulus for providing relevant courses. One must assume that the remaining authorities are simply apathetic!

In the field of higher education, the problem does seem to be lack of interest - any early music activities seem, for the most part, to be due to the enthusiasm of one individual on the staff, rather than to any departmental policy. Notable exceptions are the University of East Anglia, where all incoming students take one term's course on the rudiments of early music, and performance is an integral part of the course structure; and Chichester College of Technology, which already has an early music option as part of its music diploma course, and is starting a new full-time course in early music next Sep-

Organising committee: John Bryan Grayston Burgess Tim Crawford David Fallows Leslie East Jennifer Eastwood Rodney Eastwood
Ian Harwood Simon Hill Peter Holman Madeleine Inglehearn John Kelsey Robin Macrone Jeremy Montagu Terry Pamplin
Chris Sayers John M Thomson Brian Trowell Bruce Turner Joan Wess

tember. Otherwise, although topics related to early music are taught as a matter of course (eg, history, palaeography, etc), the practical performing experience of the music is kept totally separate. As one teacher in the field has told us: "I feel that early music is a fringe activity, not really taken terribly seriously by either staff or students, with a few notable exceptions. I would like the opportunity to work more closely with academic staff to produce courses where the performance and study of performance practice goes hand in hand with historical studies: too rarely is the connection made between the work of the imported 'early music specialist' and the 'real' life of the institution."

The examining bodies have expressed a lot of interest and support. In particular, the music colleges seem to be taking early music more seriously, both by offering courses or options in early music, and by examining in specific instruments, but Trinity College is still the only one offering Grade exams in some early music instruments. GCE boards rely largely on Grade exams for the practical side of their syllabuses, and therefore feel that any impetus should come from them. The general feeling seems to be that Boards would be willing to include early music if there was a demand from the schools - something of a "chicken and egg" situation! CSE examinations are more hopeful, in that practical work and projects play an important part, although there is no specific indication that this should include early music. Much is left to individual teachers, and anyway, "how early is early music", they ask. The new 16+ examination should in theory offer more scope for early music activities, but judging by the national criteria for music, the continued place of project work in the programme appears to be discouraged, which can only mean a lessening of opportunities in early music related areas.

Already our researches have given some pointers for future action by NEMA. There is patently a lack of information, especially amongst LEA's; perhaps a first step would be the organisation of a seminar for LEA music advisors, to make themselves aware of what is possible, and where to go for information. This could also be an opportunity to invite publishers and instrument makers, to discuss the problems of the high cost of music (often only available in expensive Complete Editions), and of instruments. (The 1980 suggestion for "national" peripatetic early music teachers is not out of place here, as well as the idea of instituting one year diploma courses to give qualification for early music specialists to work in local authority education.)

With the demise of Progress Instruments, some way of providing inexpensive instruments for schools and beginners must be found. Terry Pamplin is already exploring the possibilities with makers, through the London College of Furniture, especially with a view to producing designs which could be made by school workshops, but there may well be a case for NEMA instituting, say, a national competition for the production of such instruments.

In the field of examinations, we must act to break the vicious circle of supply and demand, and convince examining boards that there <u>is</u> a demand for Grade exams in early music. We must also lobby the 16+ working party to ensure the continuation of project work assessment, which will allow for the inclusion of early music-related subjects. Above all, NEMA must fulfil its primary function of acting as a focus, in bringing people together, and putting educators and examiners in touch with those who can best advise them.

The committee has already had a very fruitful and stimulating meeting with Alison Bagenal (whose co-operation we hope will continue in the future), and many of the foregoing proposals have as a result taken on a more concrete form. Firstly, it is suggested that NEMA seek to attend and possibly to address the ISM annual conference at Harrogate in April, as well as the annual conference of LEA music advisors in June. This could be used to drum up interest for a series of NEMA-sponsored weekends run by the Bagenals, covering various aspects of early music in schools, including the making of low-cost instruments. Secondly, NEMA should put together an education demonstration package, with displays, video, etc, which could be toured to local DES conferences etc, to convince music teachers of the <u>uniqueness</u> of the early music approach, and its

applicability to all periods and types of music. Thirdly, we should try to sow in the minds of examining boards the concept of examining ensembles (as is already done to some degree in Scotland) - this is a prerequisite for early music, but one which could be just as valid for later music.

The next step for the sub-committee (if re-elected) will be to seek further amplification from those institutions who have already responded, and to concentrate our enquiries on schools now known to have a flourishing activity in early music. The committee plans to present a written Interim Report to the Council by Easter, with a Final Report for possible publication and circulation to all those institutions canvassed by the end of the year. This could be NEMA's first chance to make itself felt outside the world of early music, so we should seriously consider seeking funds to enable a proper publication along the lines of the 1977 Conference Report, and to make it freely available to all those who could best make use of it. We must convince people that early music is not just a matter of quaint instruments, but an attitude of mind and approach to any music.

14.i.84

We are reprinting this report of NEMA's Education Committee, which was presented to their AGM, with their permission in order to show you some, at least, of the things that they are achieving.

They have a number of plans in their pipe-line, one of which I am allowed to tell you about (John Kehoe is in the middle of preparing their next bulletin): They are arranging a travel etc package deal, at greatly reduced rates, for the final weekend of the next Bruges Festival, from 3rd to 6th of August. Rates are not yet fixed, but they will be cheaper for NEMA members than non-members (they are willing to take some non-members as well); further details from Gavin McGuire, whose address is on p.9 of this Bulletin.

JM

BATE COLLECTION OF HISTORICAL INSTRUMENTS

PLANS AVAILABLE

		Cat.no.
RECORDERS:		
Bressan treble, ex Edgar Hunt Collection		0112
Drawing by Fred Morgan, 1 A 3 sheet	£ 1.00	
Dossier by Friedrich von Huene, consisting of 3½ A3 sheets of plans 1 A3 perspective drawing 1 A4 engineer's drawing of voicing details	£ 5.00	
Renaissance basset, ex Michael Morrow Collection, marked !! !!		0117
Drawing by Tim Cranmore, 1 A1 sheet despatched folded in A4 envelope; if you want it rolled in a tube, please supply your own tube and stamps (or postal coupons)	£ 2.00	
TRAVERSO:		
Stanesby jr, Montagu Collection, ivory		x1050
Measured by Andreas Glatt, drawn by David Cox for Bill Elliott. On the reverse there is a trace by Rod Cameron. You are warned that this flute has been cut down in the late 18th century to suit contemporary pitch. 1 double-sided A3 sheet.	£ 2.00	
OBOES:		
Anonymous, 3-key, late 17th century, known as The Galpin		200
Measured by Mary Kirkpatrick, drawn by Ken Williams (see this Bulletin, p.6). 2 A3 sheets	£ 2.00	
Anonymous, 3-key, probably German transitional, ex Edgar Hunt Collection		292
Measured by Mary Kirkpatrick, drawn by Ken Williams as previous. 1½ A3 sheets.	£ 2.00	
CLARINETS:		
George Miller, pair in B♭, lent by the Executors of Miss O.K.L.Lloyd-Baker; portrayed by Zoffany 'The Sharpe Family'		4008 4009
Drawings by Alan Mills, 9 A4 sheets 6 keys, with upper trill key on 'wrong' side.	£ 5.00	
Baumann, in C; 6 keys, the 6th the cross C#		40
Drawing by Alan Mills, 6 A4 sheets	£ 3.00	
Milhouse in B♭; 5 keys. Montagu Collection		III 170
Drawing by Alan Mills, 6 A4 sheets	£ 3.00	

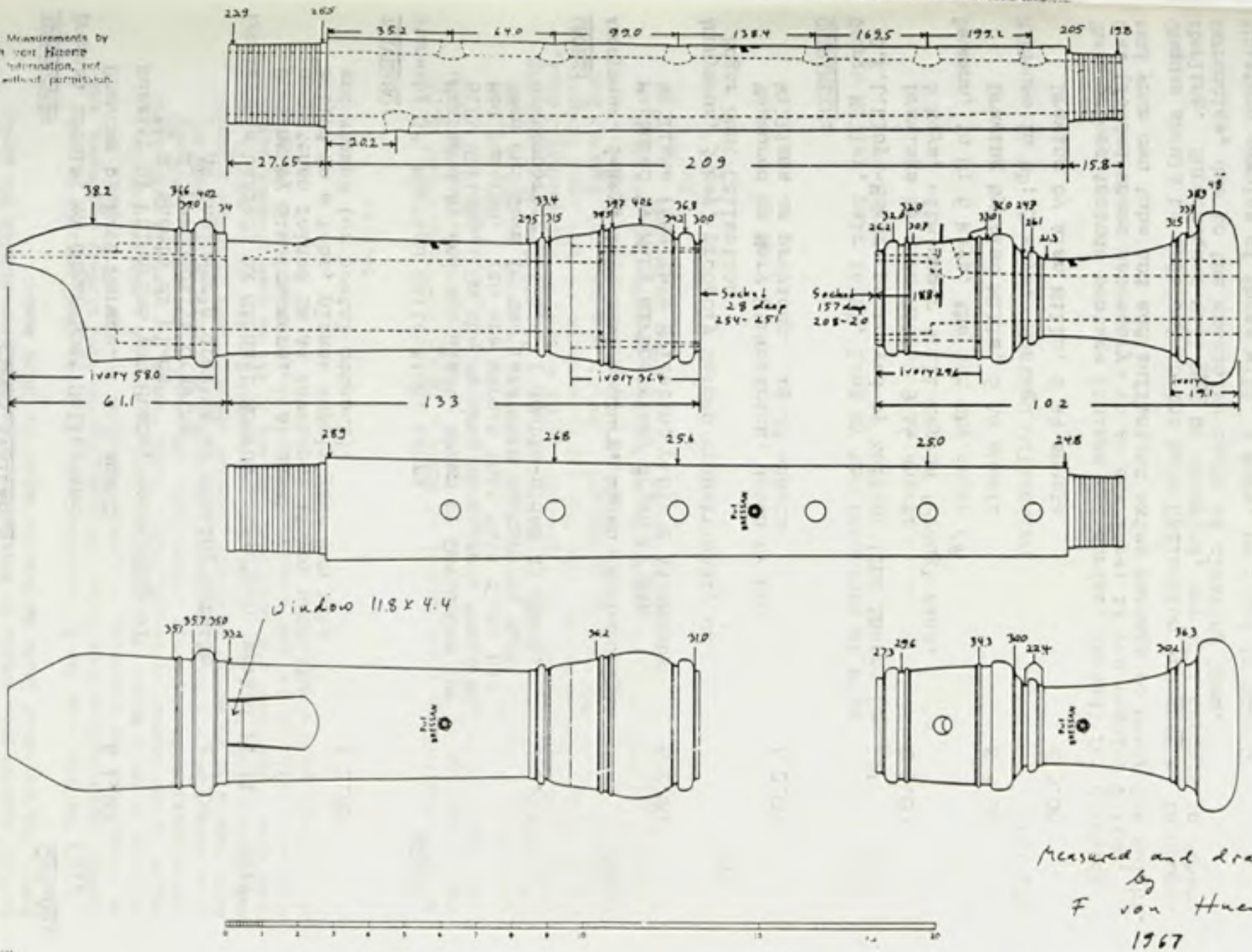
These prices include postage (inland and surface abroad) for despatch flat (folded where necessary) in A4 envelope; if you require rolled, send your own tube and add sufficient extra postage to cover its weight.

Cheques should be made out to the Bate Collection and must be in pounds sterling. Eurocheques will not be accepted, nor will cheques in other currencies, due to the excessive costs of clearing them.

Miniature samples of these will, I hope, be found in this Q

Jeremy Montagu, Curator, Bate Coll.

Drawing and Measurements by
Friedrich von Huene
Historical information, not
to be copied without permission.



Measured and drawn
by
F von Huene
1967

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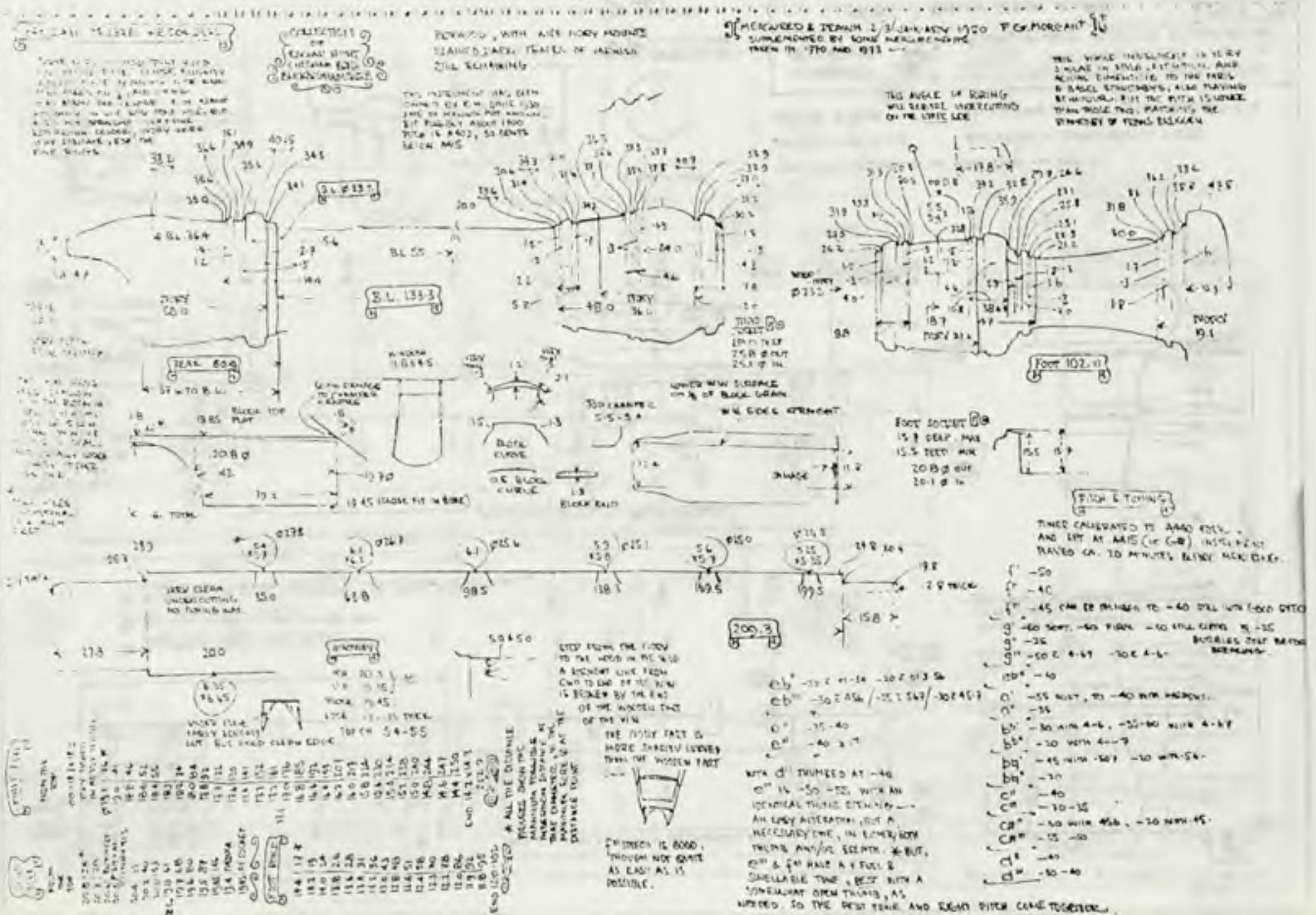
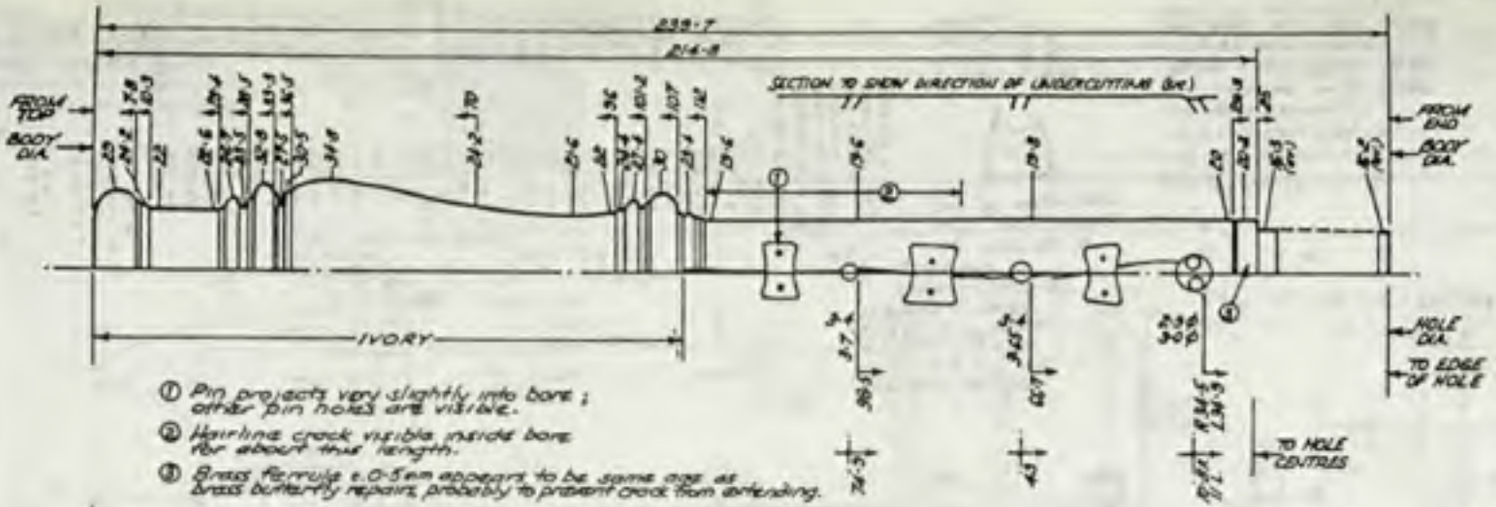
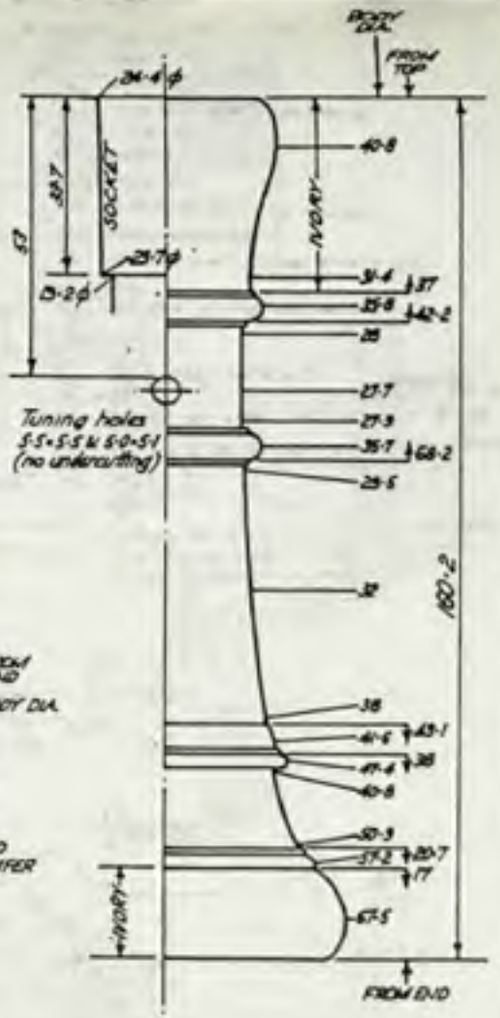
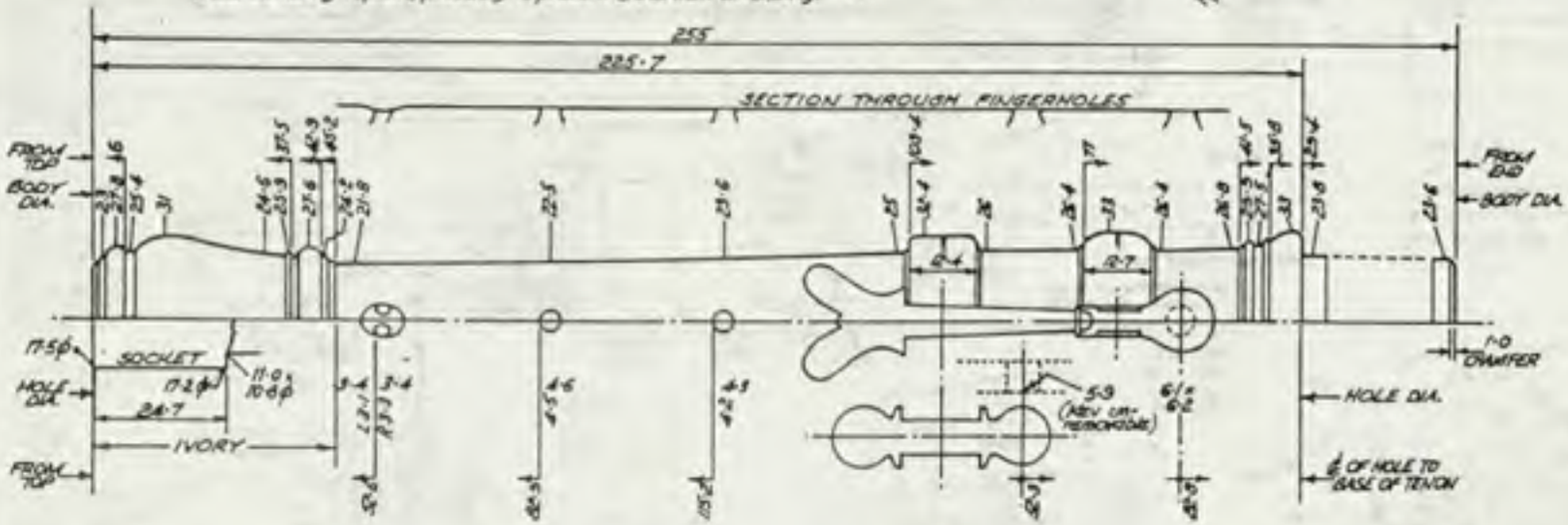
OXFORD 1984

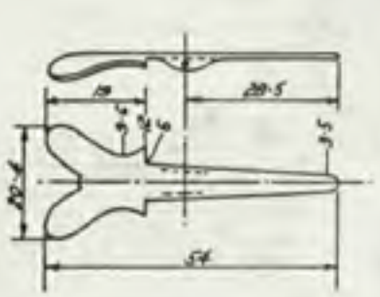
BATE COLLECTION 0112

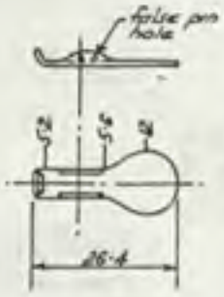


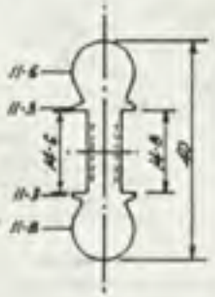












FOR BORE DIMENSIONS SEE DWG. NO. 200 A.

DIMENSIONS in m/m.

DEL. K.N. 24·1·84.

MATERIAL – BOXWOOD & IVORY.

MEASURED BY Mary Kirkpatrick 1977-78 (?)

UNIVERSITY OF OXFORD

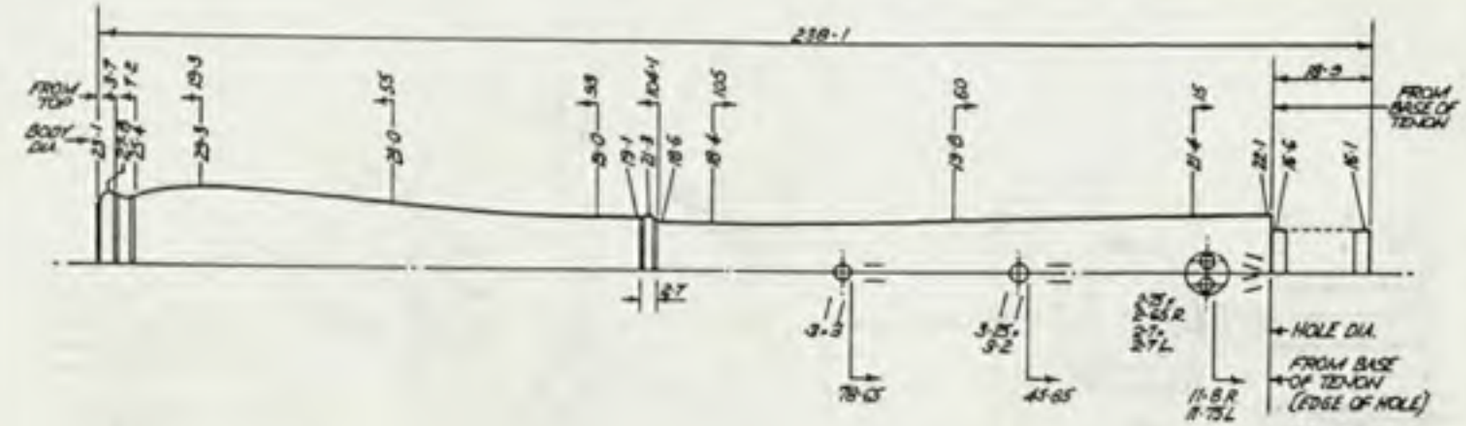
BATE COLLECTION OF HISTORICAL INSTRUMENTS
Faculty of Music St Aldates Oxford OX1 1DB

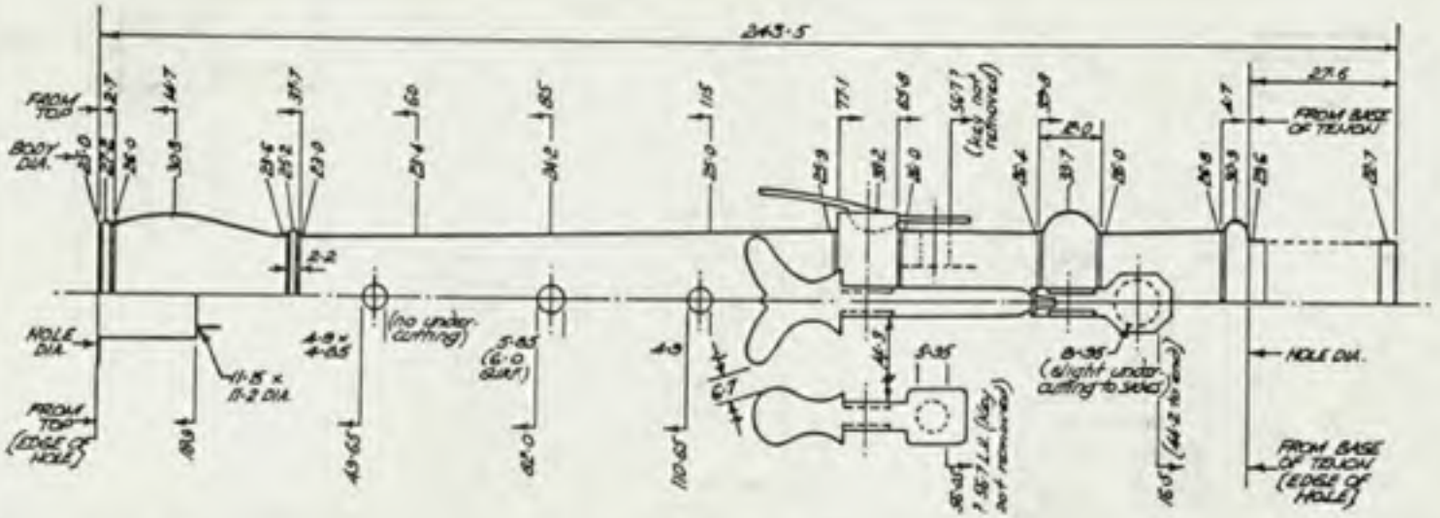
ANON. 3 Keyed Oboe c. 1690
(Known as "THE GALPIN OBOE")

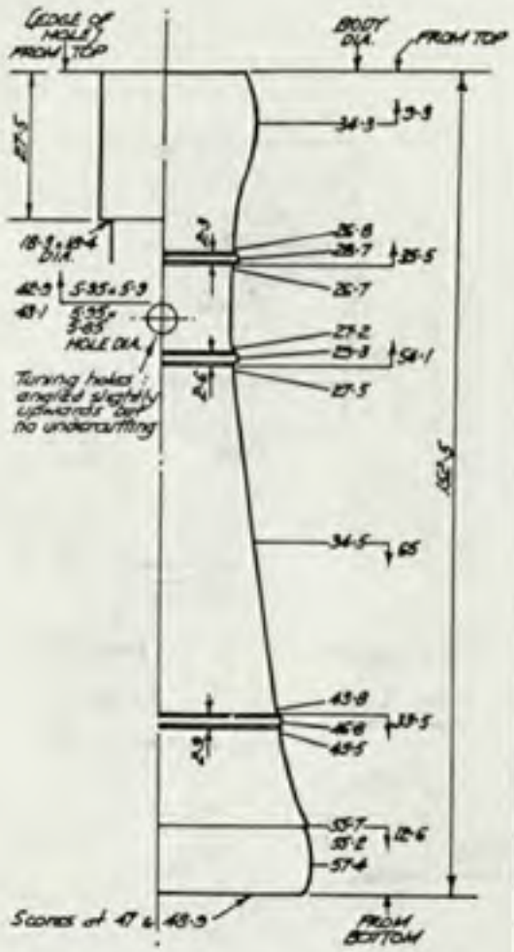
SCALE F.S.

DWG. NO. 200

20







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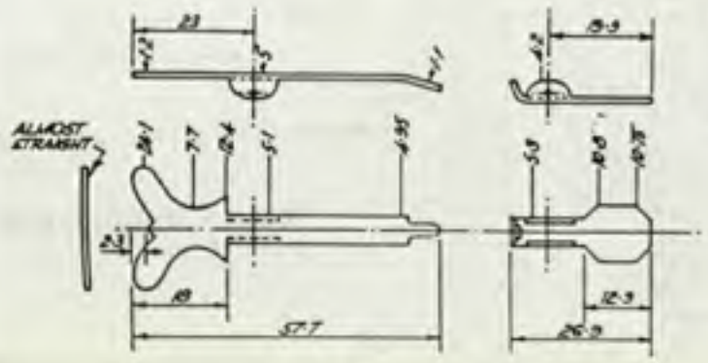
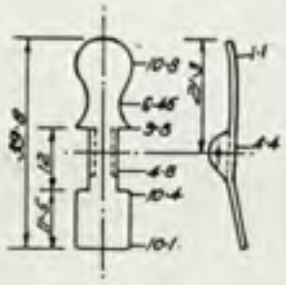




FOR BORE DIMENSIONS SEE DWG NO. 292 A.

MATERIAL - BOXWOOD, Medium-light brown possibly age darkened. German transitional style with unusually narrow bored top joint.

DIMENSIONS in mm.

DEL. K.W. 20-11-83.

FINGERHOLE & KEY DIMEN. by Mary Kirkpatrick (31-1-88) others by Gail Hennessy (with gauges from Mary Kirkpatrick)

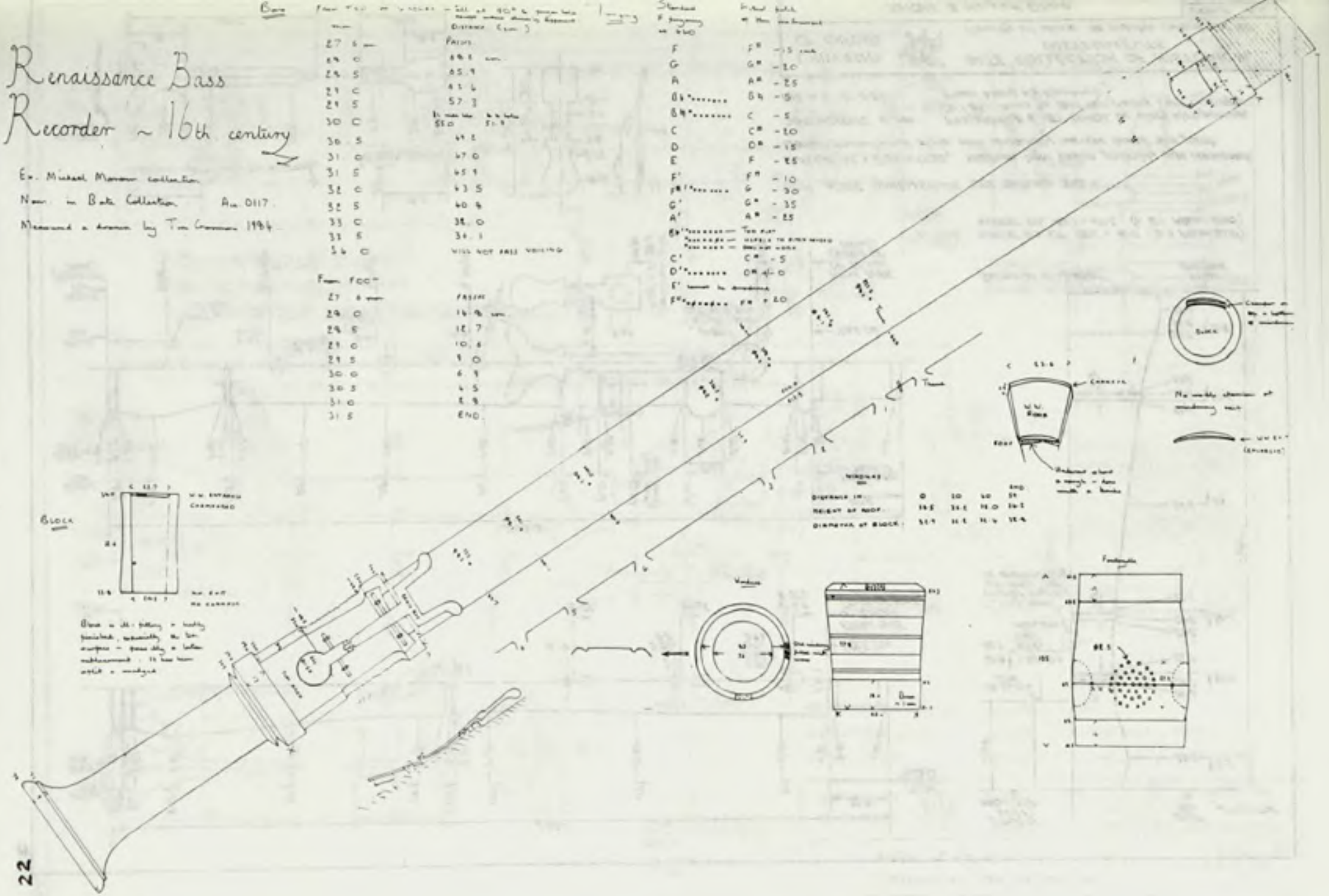
UNIVERSITY OF OXFORD	BATE COLLECTION OF HISTORICAL INSTRUMENTS Faculty of Music St Aldate's Oxford OX1 1DB	
ANON. 3 Keyed Oboe		SCALE F.S.

Renaissance Bass Recorder ~ 16th century

Ex. Michael Morrow collection

Now in Bate Collection Acc. 0117

Measured & drawn by Tim Crossman 1984



MUSEUM OF INSTRUMENTS
THE ROYAL COLLEGE OF MUSIC
PRINCE CONSORT ROAD
SOUTH KENSINGTON
LONDON SW7 2BS

PLANS OF INSTRUMENTS

Technical drawings of the following instruments are now available. These dyeline prints are detailed full-scale plans on stout paper for the benefit of those wishing to carry out organological research or build copies.

The prices shown below do not include packing (in cardboard mailing tubes) and postage. VAT at 15% has to be added for UK orders. Please do not send money with your order, but wait until you receive our notification. On receipt of your remittance, we will send you the drawings.

For orders from abroad, please send a cheque or bank draft in sterling, payable by a bank in London. If, however, you wish to pay in your own currency, please add the equivalent of £3.00p. to your remittance to cover the bank costs which will be payable by us. Please do not send a Post Office money order.

RCM No.		
48	Cittern by Gieronimo Campi, Italian, late 16th century. Lacks rose and bridge. Overall length 728 mm. Original string length 433 mm. approx. (1 sheet, 850 mm. x 600 mm.) Drawn by Ian Harwood, 1974.	£6.00p.
26	Chitarrone by Magnus Tieffenbrucker, Venice, 1608. Stringing 6 x 2, 8 x 1. Body length 679·5 mm. String lengths 933 mm. approx. and 1700 mm. approx. (3 sheets, 850 mm. x 600 mm.) Drawn by Ian Harwood, 1974; revised, 1977.	£9.00p.
171	Guitar by Belchior Dias, Lisbon, 1581. Vaulted back, body length 365 mm., belly not original. (2 sheets, 1120 mm. x 770 mm., with additional notes.) Drawn by Stephen Barber, 1976.	£13.00p.
32	Guitar, attributed to Jean Voboam, Paris, c. 1680. Length of back 456 mm. Bridge not original. (2 sheets, 1280 mm. x 950 mm. and 950 mm. x 810 mm., with additional notes.) Drawn by Stephen Barber, 1979.	£13.00p.
46	Division viol by Barak Norman, London, 1692. Length of belly 634 mm. Present string length 658 mm. (2 sheets, 1370 mm. x 1040 mm.) Drawn by Stephen Barber, 1976.	£14.00p.
63	Recorder (treble), I. Denner, Nuremberg, early 18th century. Carved ivory. Pitch: A = 415 approx. (1 sheet, 585 mm. x 470 mm., with additional notes.) Drawn by Friedrich von Huene, 1968; revised, 1978.	£4.00p.

1 Clavicytherium, ? German, c. 1480. £22.00p.
1 x 8. Present compass $E-c^2$; original compass thought to have been E 'E♭' F G-g^2. Overall height 1415 mm.
(1 sheet, 2360 mm. x 1030 mm., with additional notes.)
This new drawing replaces the less detailed one made by Derek Adlam and William Debenham in 1976.
Measured and drawn by William Debenham, 1983.

2 Harpsichord by Alessandro Trasuntino, Venice, 1531. £22.00p.
Formerly 1 x 8, 1 x 4, now 2 x 8. Present compass BB/GG-c^3; original compass thought to have been C/E-f^3. Overall length 2250 mm. Outer case not drawn.
(1 sheet, 3480 mm. x 1030 mm., with additional notes.)
Drawn by William Debenham, 1977.

175 Harpsichord, ? Italian, c. 1575. £18.00p.
Originally 1 x 8, now 2 x 8. Original compass C/E-c^3; present compass C-d^3 without C♯. Overall length 1860 mm. Lacks original outer case.
(1 sheet, 2130 mm. x 1030 mm., with additional notes.)
Drawn by Grant O'Brien, 1974.

3 Bentside spinet, English, 1708. £15.00p.
Compass BB/GG-d^3, the lowest two sharps being divided to give both the short octave and the sharps. Overall length 1680 mm.
(1 sheet, 1930 mm. x 1030 mm., with additional notes.)
Drawn by William Bright, 1975.

209 Regal, German, 1629. £15.00p.
Compass C/E-c^3. Metal resonators. Overall length 1165 mm.
(1 sheet, 1875 mm. x 1025 mm.) Drawn by Christopher Clarke, 1979.

A series of photographs of each of the above instruments is also obtainable. Details will be sent on request. (There is a large number for some of the keyboard instruments, so it is unlikely that a complete series would be desired.) Prices: 4" x 6" prints £1.50p. each, 6" x 8" prints £2.00p., 8" x 10" prints £2.50p., plus postage, and VAT for UK orders.

FoMRHI Comm. no. 522 The Icelandic Langspil

Iceland has, or had, two instruments of its own: the fiðla and the langspil. Both instruments are played with the bow, and in some degree descend from the Renaissance scheitholt. Last July, at the end of a week spent in the National Library in Reykjavik, I found myself with a couple of hours to spare before coming home, so I "did" the National Museum. Among the exhibits was a number of musical instruments, including specimens of both fiðla and langspil. I had no measuring equipment, and couldn't get at the instruments, but I took a rough drawing of one of the langspils which I reproduce here for what it's worth. All sizes are approximations. I presume that the sides and back are of the same thickness as the soundboard: that the base-block which closes the lower end is at least ½" thick: that the beechen pegbox has a tenon about 2" long: that the joins are strengthened inside by linings or fillets: and that the soundboard is not barred. A strip of 7/16" high moulding at each end does duty for bridge and nut. The bow is a (birch?) rod 3/8" in diameter, has a fixed frog, and is straight at no tension. Whether the bow and strings are original I have no idea.

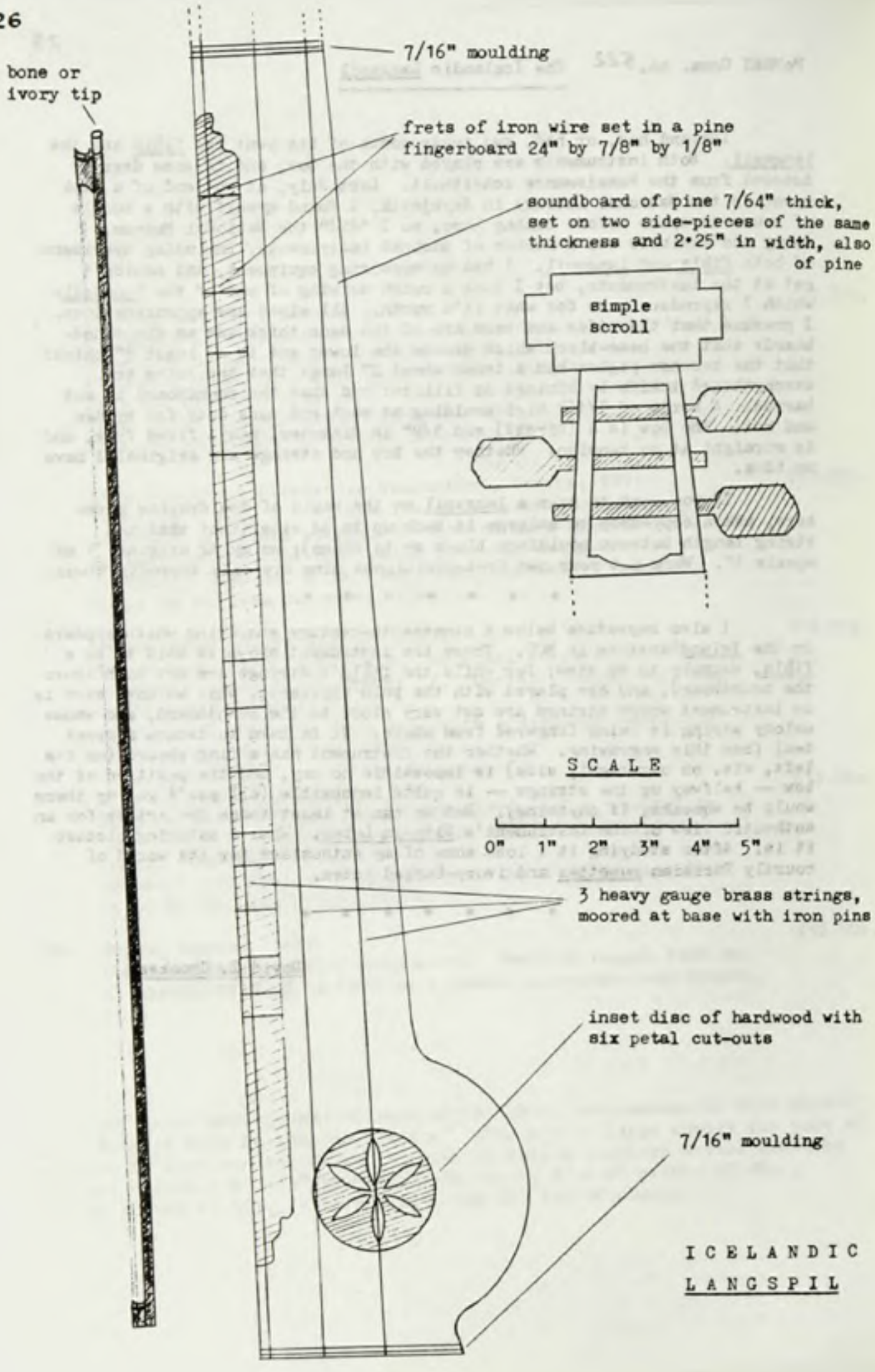
If you want to make a langspil on the basis of the drawing given here, ask a copy-shop to enlarge it back up to A4 size (test that the string length between mouldings blows up to 266mm); on my A4 original 1 cm equals 1". Work out your own fret-positions: mine are only approximations.

* * * * * * *

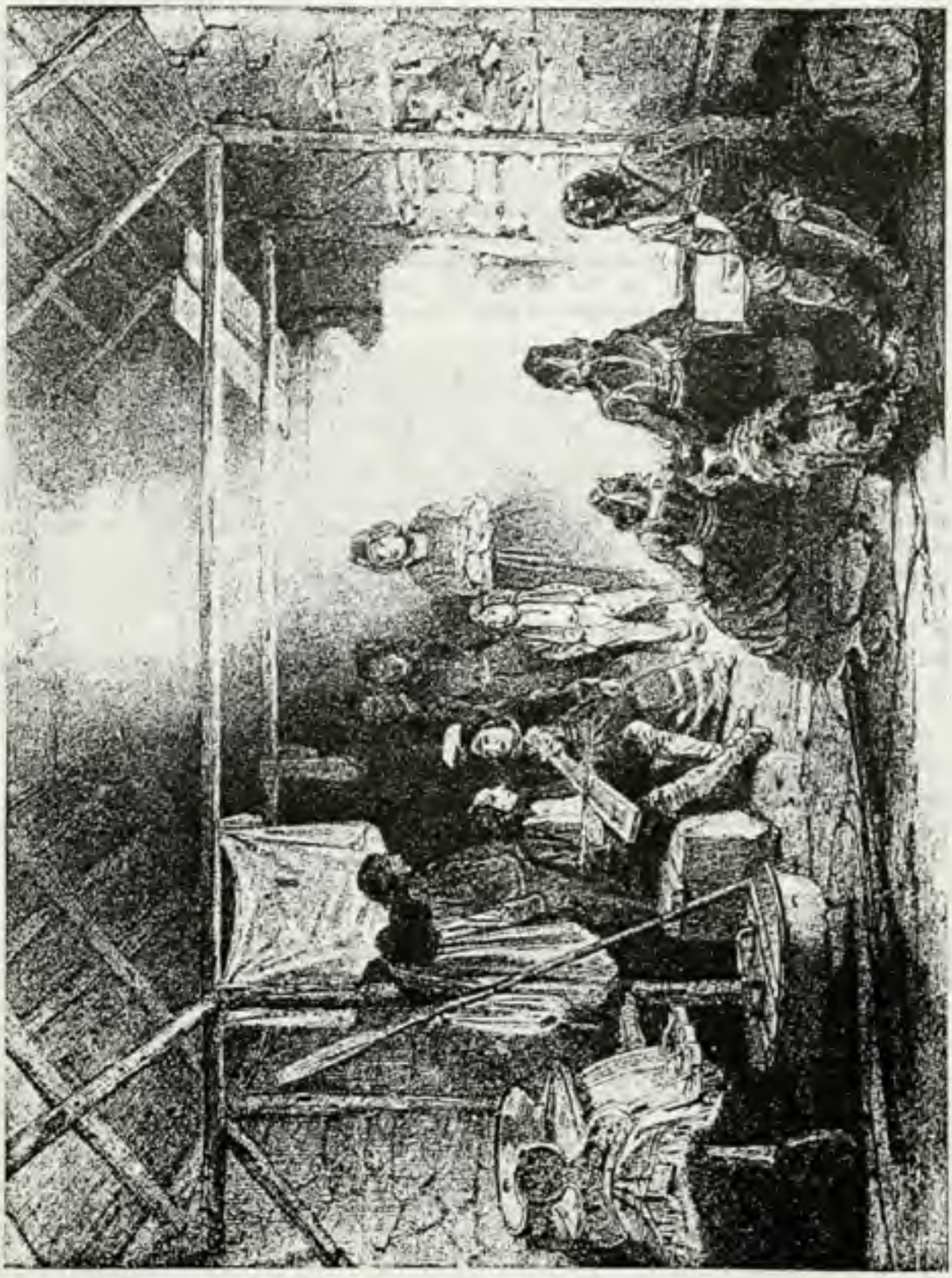
I also reproduce below a nineteenth-century engraving which appears in the Island article in MGG. There the instrument shown is said to be a fiðla, wrongly in my view; for while the fiðla's strings are set high above the soundboard, and are played with the palm uppermost, what we have here is an instrument whose strings are set very close to the soundboard, and whose melody string is being fingered from above. It is hard to deduce a great deal from this engraving. Whether the instrument has a fingerboard (on its left, viz. on our right, side) is impossible to say, and the position of the bow — halfway up the strings — is quite impossible (all you'd get up there would be squeaks, if anything). But we can at least thank the artist for an authentic view of the instrument's Sitz im Leben. What a sobering picture it is! After studying it I lose some of my enthusiasm for the world of courtly Parisian musettes and ivory-backed lutes.

* * * * * * *

David D. Crookes



ICELANDIC LANGSPIL



FoMRHI Comm 523 Ephraim Segerman

Trends towards Historical Accuracy in the Popular Designs of Pre-Classical Stringed Instruments

What follows is how I see some of the modern changes in design of historical stringed instruments. Much of it is common knowledge, but where else will a future historian of the current early-music movement see it written? Some of it is controversial, and it will be useful for us as well as that future historian for that controversy to be aired.

LUTES

Early modern lutes usually displayed some features of guitar construction. These included heavier-than-original bridges and fingerboards, linings for glueing the soundboard on, just a few transverse bars or even fan barring and metal or ivory frets. The pinnacle of the art of the guitar-like lute was Rubio's "JB" model. Such instruments are not taken seriously as lutes nowadays, except by a few guitarists.

More than a generation ago gut or silk were the only string materials available. On more usual-sized lutes (surviving or seen in pictures), tuning the highest string to g' at a'=440Hz (people then were very loathe to consider other pitch standards) was rather less than practical. When nylon strings became available this became practical and led to a blossoming of the instrument. Nowadays gut stringing is becoming fashionable again. The acceptability of a semitone-lower pitch standard helps. Players still using nylon are dulling their bass strings made of metal wound on nylon floss to suppress brilliance and sound more like the soft warmth of all-gut basses. They feel that the frequency of retuning gut strings needed is unacceptable. When they learn to retune while playing (as Baron in 1727 stated any master could do), then gut stringing will be the norm. Gut fretting is now standard, even with nylon stringing, while previously, nylon fretting was universally used.

Lute makers in recent years have taken great care in accurately copying original details in design and construction, except for the soundboard. The soundboard has been subtly redesigned to provide a strong rich and balanced sound with nylon stringing. Since gut stringing is becoming fashionable, these instruments are currently losing their acceptability.

Some years ago, most lutes made were of an all-purpose eight-course Renaissance type. Hardly any eight-course lutes are made now because such instruments were of only fleeting importance historically.

VIOLS

Most viols are bought for playing the English repertoire for sets of viols in various sizes. The original instruments for this repertoire seem generally to have had no corner blocks or wooden linings, soundboards made from bent staves glued together along four joints, double perfling, and they came in sizes so large that they will not tune comfortably higher than a tone below modern pitch. The viols available today do not have, with very few exceptions, all of these characteristics. Not many years ago, all viols made had none of these characteristics. Corner blocks and wooden linings are by now quite out of fashion. There is currently a strong movement towards bent-stave soundboards and double perfling. It will be some time yet before viols in their original larger sizes will be widely played since performers are quite resistent to restricting possible uses of an instrument because of differences in pitch standard. This situation might change rapidly after we first hear the rich resonance of such viols (as reported by Praetorius and Mersenne) in professional performances.

BAROQUE VIOLINS AND CELLOS

Baroque violins differ from modern violins primarily in the neck shape, neck angle to the body, neck fixing to the body, fingerboard, bridge, tailpiece, bass bar and stringing. The extensive use of baroque violins in professional music performance is such a recent development that there have not yet been any changes of fashion in design. The unauthentic aspects of most currently popular designs that one would expect to change are neck shape (which is too thin), neck angle to the body (which is too large), fingerboard (which is too long) and stringing (which is a compromise with much more recent gut-stringing). Except for the stringing, instruments of current designs are historically quite appropriate for post-baroque late 18th century music.

Most of the above also applies to the baroque 'cello. But the instrument with similar size to modern 'cellos was invented quite late in the 17th century. Before then, the bass violins used were either much larger (the French type) or much smaller (the Italian type). The use of these other sizes for 17th century music is just beginning.

HARPSICHORDS

Some years ago most harpsichords made had a varnished wood-grain finish. This finish had vague similarities with some late- and post-baroque decorative practices. Then a painted finish became popular, with the maker usually designing his own simple decoration with lines of contrasting colour. Recently, makers have been experimenting with decorative schemes much closer to the Renaissance and baroque originals. On Flemish-style instruments, this involves marbled paint exterior with the interior decorated with patterned papers, lettered mottos, a gilded cast rose and painted floral and other decoration. This decorative scheme has not yet been fully accepted by the public, probably because it seems too flamboyant for the modern aesthetic principle of functional design without frills in the objects one lives with.

Early modern harpsichords had wooden jacks which fitted too tightly in their guides, and so sticking became a problem. This was 'solved' by using plastic jacks which stuck less often. It has recently been realized that the larger holes in the guides of surviving harpsichords were not the result of wear, and wooden jacks are now again the norm.

Centuries ago, the skills of cutting quills from bird feathers were universal amongst those who could write, and so doing the same for harpsichord plectra was simple. But cutting quills was considered unacceptable in the modern harpsichord revival. Early modern harpsichords usually used leather plectra. Nylon was experimented with as an alternative. Then Delrin, another modern plastic, became available and its use quickly became universal. Nowadays, quills are becoming fashionable amongst those who want the best sound out of their instruments and are willing to put in the extra maintenance time involved.

Modern harpsichord makers have rarely considered copying original soundboard thicknesses and thickness graduations. The principle followed has been to maximise resonance by keeping the soundboard as thin as one can while keeping it structurally sound. This principle is now being challenged by the superior tone produced by some instruments currently being made which follow historical thicknessing patterns.

FoMRHI Comm 524 Ephraim Segerman

Was the Violin a French Invention After All?

In 1613, Cerone, writing in Spanish, used the terms 'Rabeles' (which are rebecs) and 'Rebequines' (which by a process of elimination, comparing the instruments in use with those he lists, most certainly means vi[illegible]). The Portugese terms, even today, are 'rabel' for rebec and 'rebeca' for violin. Praetorius (1618) in Syntagma Musicum Vol II, p4 and 48, reported that an alternati[illegible] name for the violin was 'Rebecchino', while the Italian term for rebec is 'ribec[illegible] a small one could be a 'ribeccino'. In Vol III, p121, he uses 'Ribecchino' instead as equivalent to a violin. I suspect that this was an erroneous correction he made after consulting an Italian dictionary (the original information coming from a travelling musician). The dictionary, if it was not completely up-to-date, would only list the rebec, and Praetorius would follow German practice, from at least the beginning of the 16th century, of not to distinguish linguistically between the shapes and construction of bowed instruments of the same size using the same strings, tunings, technique and playing style.

The 'Reb' at the beginning of the terms for violin could only relate to the English or French names for the rebec. Association with the French name is much more likely than with the English one since we are dealing with a Mediterranian linguistic phenomenon.

Before speculating how the French name for the rebec became associated with the violin, let us first distinguish between the violin and the instrumewnt it developed from, a smaller member of the family called 'viole da braccio' or 'violette' in Italy. The name usually associated with a member of this family in England was 'vyolen' (though 'violett' and 'vyolon' were also used), in France 'violon' and Germany 'geige'. The Spanish name calls it a bowed vihuela without frets. All of the four sizes of French viole da braccio had four strings, but this was only true of the bass member elsewhere, where the other sizes had only three.

There is no evidence of an essential difference in appearance between a viole da braccio and a violin. It is possible that violins always had four strings, in which case they could well have been, in Italy, the model made for export to France in Cremona. Reports of the violin as a loud soloistic instrument distinct from the viole da braccio family don't occur before the final quarter of the 16th century. Zacconi in 1592 clearly distinguished between violins and viole da braccio as coexisting instruments.

The transformation that made a treble or alto viola da braccio into a violin involved a change of name in Italy, the Iberian peninsula and England (where it became 'violin'), but no change of name was involved in France, Germany and in Italy for the lower members of the viola da braccio family when they transformed at around 1600. In 1609 Banchieri tried to correct this by calling the whole transformed family 'violini da braccio', but his terminology was not adopted by others.

I've postulated (Comm 136) that the nature of the transformation primarily involved the use of a soundpost. Since the soundpost breaks the symmetry of the soundboard resonance and so allows much heavier stringing without wolf instabilities, I've postulated thicker stringing resulting in greater acoustic output on the violin. The soundpost also increases bass resonance, and 16th century violin music seems to lie remarkably low on the instrument. Also in the last quarter of the 16th century, we find a large growth in the availability and use of roped gut bass strings which allow thick short strings (such as those used as violin basses) to have pitch focus and to be true. Such strings were called Catlines, Catlings, or Catlins.

The first written evidence for the soundpost is in Shakespeare's 'Romeo and Juliet' (Act IV, Scene v), where the musicians are significantly named 'Rebec', 'Soundpost' and 'Catling'. These seem to be the crucial factors in the origin of the violin. It is

interesting that the audience in the Globe was expected to recognise the term 'soundpost' as a musical one. A member of the general public today probably wouldn't. But he would know quite a few technical terms of space flight, since that is new and a topic of general conversation. This could then be an argument supporting the hypothesis that the soundpost was news at some previous time for the generation that first saw 'Romeo and Juliet' in 1595.

Let us now return to how the rebec might fit into the picture. One possibility is that French rebecs with soundposts appeared with a big fat raucous sound and other Mediterraneans imitated it by putting soundposts into their viole da braccio, and then called the latter by the French rebec name. One trouble with this scenario is that I know of no evidence for the rebec in sizes other than the thin (with ten inch string stop) treble (called pochette) being used in France at the time, and I can't imagine a violin's sound being considered enough of an imitation of a pochette's sound (even with a soundpost) to be called by the same name. I think that it is more likely that the soundpost inside a viola da braccio was a French invention and the loud raucous scratchy sound led the French players to name it after an obsolete larger rebec. After a while, the French reverted to the earlier name 'violon', perhaps when they learned how to control the violin's tone and the instrument could be used in the same way for the same purposes as previously.

FoMRHI Comm 525 Ephraim Segerman

Fingerboard Length on the Baroque Violin

Most of the violins used in baroque orchestras today have been made or restored with fingerboard lengths allowing about two octaves of fingered range on each string. As reported on p523 of Marcuse's "Survey of Musical Instruments" (1975), Francesco Galeazzi wrote in 1791 that modern compositions cannot be played on a fingerboard that is shorter than two octaves for the open string. Earlier, towards the end of the baroque, Leopold Mozart's 'Violinschule' (1756) discussed positions up to the seventh (with the highest note a''') and no higher. This is an octave and a 4th on each string. This range is also given in Playford's 'Skill of Musick' (I've looked at the seventh edition of 1674). There are other baroque violin tutors (eg Germiniani) which I haven't consulted, but I would be very surprised if any of them offer evidence of a greater range on the fingerboard.

A two-octave range would appear in pictures as a fingerboard extending over 3/4 of the distance between the nut and bridge. For a range of an octave and a 4th, it would be 5/8 of this distance. The way I check this visually is to pick the midpoint of the nut-to-bridge distance and see if the end of the fingerboard is either a quarter or a half of the way between this midpoint and the bridge. The paintings and drawings from quite late in the 18th century that I've seen do show the requisite 3/4, but all of the earlier ones I've seen show 2/3 at the most.

When discussing this with a leading baroque violinist recently, he claimed that the range of an octave and a 4th might have been usual for ordinary baroque violinists, but soloists needed and must have had a longer fingerboard. I countered by indicating that some of the pictures were of soloists, and he suggested that the artist had the violinist pose only for his own appearance and an ordinary violin was later used as a model to depict the instrument being held. He cited that the music of some baroque virtuosi such as Locatelli (1693 - 1764) required a longer fingerboard. I suggested that modern violinists play higher than the two octaves and a 4th that the modern fingerboard offers by fingering in mid-air. He countered that this is much harder to do in the second octave than in the third. When I got home I looked Locatelli up and found that one of his caprices goes up to the 14th position. If he fingered only on the fingerboard, nothing less than a modern length would do. My violinist friend would counter that Locatelli had a two octave fingerboard and fingered the third octave without it.

According to the rules of scholarship, I'm right. The only evidence my violinist friend can offer for his assertion is that fingering past the fingerboard in the second octave is impractical. I wonder how hard he tried. I know that he hasn't tried proper heavy baroque Italian stringing, which could make a difference. Of course I cannot prove that every baroque fingerboard bar none offered a range of an octave and a 4th, but his position that most virtuosi used a longer fingerboard needs further support to be credible.

My violinist friend is extremely knowledgeable on the history of the violin and its technique. If he weren't so busy playing, he could be writing highly respectable articles on these subjects. His approach is typical of many researchers. Early in their studies they come to conclusions that can only be shaken by airtight proofs that history can rarely offer. After they've made up their minds, all of the evidence that doesn't support their view is either twisted or discredited with no regard for objective probability. These people often do very valuable research, digging out very useful material. The only real danger they present to the advance of scholarship is that readers of their writings will often accept their conclusions without bothering to evaluate the chain of arguments leading from the raw historical information they collect to their conclusions.

The baroque violinists of today use the same instruments for playing the classical repertoire. No claims of anadronism in fingerboard length can be made here. One may argue that the historical sound is what counts and why should it matter that violinists will use the same instruments for the classical and baroque repertoires? The longer fingerboard doesn't affect the sound. My argument is that playing on or off the fingerboard can well sound differently, and if variations in technique are involved, this could well influence interpretation. Around the 1770's, changes other than lengthening the fingerboard were effected on violins, and they also influence sound. The angling back of the neck was associated with a higher bridge, and the bass bar got longer, thicker and higher. So a classical violin cannot be acoustically equivalent to a baroque violin.

And acoustics isn't all that matters. A baroque violinist can put gut strings on a modern fiddle and, using an early style of bow, make it sound remarkably close to a baroque violin. But this is unacceptable in the baroque violin world because visual aspects count as well. They don't use chinrests even though they hold their instruments with their chins. Fingerboard length is a very obvious aspect of visual appearance. As soon as a fraction of the audience and a critic or two become aware of the proper fingerboard length on a baroque violin, the players will have to do something about it. I hope they will do more than chop the end off to distinguish between the classical and baroque violin.

FoMRHI Comm. 526

Joseph M. O'Kelly

Some comments on Bulletin Supplement No34 "O'Kelly Table"

I was horrified to see the misleading way in which my tension table for lute strings has been presented and the sweeping statements by the Guest Editor which accompany it. I would like to make the following points:

The table was prepared at the end of 1981, and was immediately sent to FoMRHI. Approximately six months later, Mr Segerman, when queried as to why the table had not been published, indicated his unhappiness that the table dealt with unauthentic strings (not recommended by NRI). He unspecifically questioned the validity of my formulae. He promised to send me his suggestions for some changes; however, these were not forthcoming.

At the London Music Fair (1983) I informed Mr Segerman that my table was being used by several makers and players none of whom had noticed anything wrong with it. As he had failed to give me his corrections, I requested that my Comm be published in its original form; Mr Segerman could then follow with any remarks he might have.

In its original form the table was accompanied by a simple explanation, and its use was illustrated by easy to follow examples. My presentation was designed to enable those without higher mathematics to use it. I believed that if I gave formulae justification it would unnecessarily confuse the average user. The uncontrollable decimal point on Mr Segerman's calculator makes it necessary for me to give the calculations in detail.

The string formula is normally given as:

$$f = \frac{100}{l \times d} \times \sqrt{\frac{T \times 0.981}{\pi \rho}}$$

Where f is the frequency in Hz
l the string length in m.
d the string diameter in mm.
T the string tension
ρ the density of the string material
K a constant

$$d = \frac{100}{l \times f} \times \sqrt{\frac{T \times 0.981}{\pi \rho}}$$

$$d = \frac{K \times \sqrt{T}}{l \times f} \qquad K = 100\sqrt{\frac{0.981}{\pi \rho}}$$

$$K = \frac{d \times f \times l}{\sqrt{T}}$$

It seemed reasonable when giving information on Pyramid strings to use the manufacturer's specification rather than Segerman's, and so by substitution of values from their tables we obtain:

$$K = \frac{.50 \times 392 \times .60}{\sqrt{4.427}} = 55.89$$

My P.N. values were generated using this constant.
Thus also we get my first formula:

$$P.N. = \frac{56\sqrt{T}}{l \times f}$$

The second formula: (Gut)

The density of gut is 1.3 gm/cm^3, and by substituting this value in the formula

$$K = 100\sqrt{\frac{0.981}{\pi\rho}} = 100\sqrt{\frac{0.981}{\pi \times 1.3}} = 49.01$$

thus: $\text{Gut} = \text{P.N.} \times \frac{49}{56} = \text{P.N.} \times .875$

The third formula: (Steel)

The density of steel is 7.8 gm/cm^3 thus:

$$K = 100\sqrt{\frac{0.981}{\pi \times 7.8}} = 20.01$$

Thus:

$$\text{Steel} = \text{P.N.} \times \frac{20}{56} = \text{P.N.} \times 0.357$$

Unfortunately, when the table was typed the figures in the constant were transposed. (0.375). This error would not have resulted in the 'stringing disaster' suggested by Mr Segerman.

The fourth formula: (Brass)

The density of brass is 8.8 gm/cm^3 thus:

$$K = 100\sqrt{\frac{0.981}{\pi \times 8.8}} = 18.84$$

Thus: $\text{Brass} = \text{P.N.} \times \frac{19}{56} = \text{P.N.} \times 0.34$

The above discussion may appear pedantic and over-detailed, but this is justified in the circumstances.

The values given by Mr Segerman for brass and steel would imply that these two relatively stable substances had a density greater than uranium, were therefore radioactive and unstable(would not last long). They would be very dangerous to lute, luthier and lutenist alike.

I reiterate my original request that my table is published as presented, with its accompanying simple explanation, making it of use to those not as mathematically gifted as our Guest Editor.

FoMRHI Comm.527 LUTE STRING CALCULATION AND IDENTIFICATION . Joseph M. O'Kelly

The 'Tension table' tabulates plain nylon strings against 'Pyramid' overwound strings. The outside diameter of the 'Pyramid' strings is also given. If a micrometer is available, this aids identification of strings for replacement.

The first column gives in decending order the vibrations/second (Hz) for each note from g' to EE. (if necessary this can be extended upwards by multiplying by 2. a"440Hz is an octave above a'220Hz)

The second column lists available low to medium tension 'Pyramid' lute strings. The third gives the plain nylon equivalent. This value is sometimes theoretical. (Who would want to put a plain nylon string 5mm thick on their lute!) It is this value which is generated when the string formula at the bottom of the table is used.

Examples:

1)What nylon string tuned to g'392Hz on a lute with a .59 Meter string length would be at a tension of 4 Kg.?

$$P.N. = \frac{56 \times \sqrt{\text{tension in Kg}}}{\text{Hz} \times \text{string length}} = \frac{56 \times \sqrt{4}}{392 \times .59} = .484$$

The closest'Pyramid' String is 0.475

2)What string tuned to G 98Hz on a lute with a .59 M. string length would be at a tension of 3.5 Kg.?

$$P.N. = \frac{56 \times \sqrt{3.5}}{98 \times .59} = 1.81$$ 'Pyramid'equivalent is: 1021.

3)At what tension would a 'Pyramid' 1008 tuned to f 174.6 Hz on a lute with a string length of .57 M be?

$$\text{Tension} = \left(\frac{\text{string length} \times \text{Hz} \times \text{P.N.}}{56}\right)^2 = \left(\frac{.57 \times 174.6 \times 1.05}{56}\right)^2 = (1.87)^2 = 3.48\text{Kg}$$

4)What gut string could be used to replace a 1010A1?

• 1010A1 is the equivalent of a .72 plain nylon string:-

$$\text{Gut} = \text{P.N.} \times .875 = .72 \times .875 = .63.$$

This is my original comm, which should be used with the table on page 15 of FOMRHI Quarterly No 34.

FoMRHI Comm. 528 Angelo ZANIOL

FURTHER ON EARLY MANUFACTURE OF GUT STRINGS

Following up to previous articles on this paper by D. Abbott & E. Segerman, M. Hodgson, R. Irvine and others on gut strings and their making techniques, I should like to draw interested people's attention to a little known (as far as I know it has never been quoted before) source of information about this matter. It is taken from Luigi-Francesco VALDRIGHI's Nomocheliurgografia / antica e moderna / ossia / elenco / di fabbricatori di strumenti armonici / con note esplicative / e / documenti / estratti dall' Archivio di Stato in Modena (Modena, 1884; new enlarged editions in 1888 and 1894: a copy of this very rare work is preserved in the Biblioteca del Liceo Musicale di Bologna), which is primarily a list of more than 4000 instrument makers, collectors and scholars from the Renaissance up to the Author's time. This list gives for each entry the personage's name followed by his most important biographical data known to the Author and is furthermore accompanied by a conspicuous corpus of notes, that represents perhaps the most valuable section of the whole work, even if all Valdrighi's statements need to be checked up carefully (many notes report fanciful, clearly uncontrolled information or anecdotes, others are only witty tittle-tattles).

Count Valdrighi (Modena, 1827-1899) was a distinguished amateur cellist and curator of the immense Estense Library's music archives in his birth-town. Besides Nomocheliurgografia he wrote a lot of articles on the musical life at Modena in olden times, later collected under the title of Musurgiana (1879-1893). He put also together a large collection of string and wind instruments of the 15th to 19th centuries, a complete list of which is inserted in the last edition of Nomocheliurgografia. Unfortunately after the count's death most of these instruments were sold and dispersed by his famished heirs; the remains of this rich collection are at present housed in the Modena Museum, in a poor state of maintenance and preservation, as is usual, alas, in Italy.

Concerning the document in question, I have preferred to leave it in its original form instead of translating it in English (presumably in a bad English!), since I know that most specialists like more the former solution in such cases. I myself mistrust the modern translations of early documents or treatises, for the Author's thought is always more or less distorted and often even completely altered by the translator: for instance, I wonder how it would be possible to undertake a serious reading of such works like Ganassi's Fontegara or Praetorius' Syn-

tagma Musicum only utilizing their available English translation! Of course this implies the mastery of several languages, also in their early form, but every musicologist or organologist wishing to command respect must regard this knowledge as an indispensable 'tool of the trade'.

Valdrighi's document on gut string making is taken, as he tells us, from the Gazzetta Musicale di Milano. Neither the date nor the Author of this article are mentioned, but we are informed that the latter was instructed on the subject directly by Angelo Angelucci, a member of the famous Neapolitan family of gut string makers. We are also told that another member of this family, Felice, brother of Domenico-Antonio Angelucci dead in 1765, wrote many memoirs on his family's art which he did or could not publish. It were perhaps worth trying to find out one of these memoirs in the librairies or archives of Naples, since it could remove at last some of the doubts we still have on this matter. Finally it must be pointed out that the Gazzetta's article, although far less detailed than the chapter "Fabrication des Cordes harmoniques" in the Nouveau Manuel Complet du Luthier by Maugin & Maigne (Paris, 1894; see: Musique Ancienne, 15, Janvier 1983, pp. 60-65) is nevertheless quite interesting for it contains some original statements, which in my opinion deserve to be taken into account.

(87) Dopo l'ultime indagini fatte mi risulterebbe in fallo la data apposta nell'elenco all'**ANGELO ANGELUCCI** fabbricatore di corde armoniche in Napoli; sarebbe invece un **DOMENICO-ANTONIO ANGELUCCI**, *cordaro* e *cantinaro* celeberrimo di Napoli, cui apparterrebbe la data di morte segnata al 1765, correzione che debbo alla *Gazzetta Musicale di Milano*, che se non erro ciò ha desunto dalla *Musique populaire* o dall'*Enciclopedia*, cui pare che invece ANGELO ANGELUCCI compartisse dettagli su questa fabbricazione, nel secolo scorso quasi del tutto riservata alla sola Italia. Da questi scritti ho pure conosciuto che un FELICE fratello di DOMENICO ANTONIO sunominato scrisse molte memorie su quest'arte, fatalmente poi non rese di ragione del pubblico. È antichissima fra noi Italiani la fabbricazione delle corde armoniche di minugia: ed è curiosa cosa potersi osservare che la denominazione di certa pasta per minestra, volgarmente detta *fidelini*, possa provenire per avventura da *fides*, nome latino delle corde armoniche, somigliando essa a' *cantini* degli strumenti ad arco e pizzico.

L'odierno musicologo sig. CASTRONE MARCHESI, però, scrisse non esservi traccia storica indicante il preciso nome dell'inventore di questa fabbricazione. Sino dal principio del 1600 negli Abbruzzi era in fiore, e

fu da paesotti di Salle, Musellaro e Bolognano introdotta in Roma e Napoli. D'Angioli e Cecchelli la propagarono pure da Bolognano nel Modenese: ma la mia lista, fa vedere che in Parigi se ne fabbricavano sino dal 1416 da un Dulige; e da un Antoniolo in Carpi nel 1524; nel 1423 in Ferrara da un Trentino e nel 1568 da un Rossetti; nel 1619 dall'Heisele in Modena; in Modena poi e Sassuolo non ne mancarono ne'secoli susseguenti. Secondo certe mie ricerche ad Angelo Angelucci si deve l'avere scoperto che i montoni di 7 od 8 mesi, nudriti in montagna hanno minugie che danno corde migliori di quelli che sono o più vecchi o più giovani dell'età suaccennata. Del resto non solo fabbricaronsi corde di *budelle pecorine*, ma lessi che per le *arpe* se ne sono fabbricate anche con quelle di *gatto*. Chi scrisse gli articoli, citati dalla *Gazzetta di Milano*, dopo avere notato che in questo ramo di commercio v'ha del mistero, della segretezza, e della gelosia, dà notizie sulla fabbricazione delle corde armoniche, affidategli dallo stesso Angelo Angelucci, il quale naturalmente parla del sistema in uso nel secolo scorso. Ciò è buono per la storia e qui l'unisco. « Angelucci impiegava più di cento operai nei diversi punti del regno, ove si poteva avere facilmente la materia prima.

» È colle minugie degli agnelli di sette od otto mesi che si fanno le migliori corde di violino; non bisogna che abbiano passato un anno; quelle dei mesi d'agosto e di settembre sono le migliori, non solo perchè al principio dell'estate hanno da sette ad otto mesi, che è l'età più conveniente, ma anche per essere l'estate la migliore stagione in cui la minugia si stende meglio, è più liscia, più secca e più sonora. Non fa meraviglia che in Francia si sia meno portati a tal lavoro; si uccidono pochi agnelli in sì tenera età; e poi essendo riservati pel commercio delle lane si lasciano diventar grandi; invece in Italia se ne uccide un numero prodigioso minori d'un anno.

« Le minugie di vitello sono troppo grosse, non hanno la stessa delicatezza nè la stessa armonia; così è delle minugie di montone; esse non possono servire che per le corde grosse.

« Il signor Angelucci impiega quattro persone a Napoli, che vanno due volte il giorno ai quattro canti della città, dai caprettari, specie di macellai che vendono i capretti e gli agnelli; si raccolgono le minugie e le pagano 5 grani, o 4 soldi e 3 denari e mezzo l'una; ma giacchè si rompono spesso, così se ne perdono molte.

« Si separano queste minugie in nove diverse specie, secondo la loro qualità, la loro grossezza, la loro forza, che le rende adatte a diverse specie di corde. Esse sono lunghe allora 50 piedi; tagliasi per le corde comuni la parte più grossa, che non diventa liscia come il resto della minugia.

« Si mettono a bagno nell'acqua fresca per 24 ore, e si puliscono in seguito con un pezzo di canna di giunco per togliere le feci, il grasso e le membrane inutili.

« Si mettono in un'acqua alcalina, chiamata nelle officine acqua forte. Per formare quest'acqua, si mette in circa 700 pinte d'acqua, 20 libbre di feccia di vino bruciata; con ciò si fa l'acqua più forte; per la più debole dalla quale s'incomincia, la feccia di vino deve essere diluita in una quantità d'acqua 4 volte maggiore, ossia in ragione di 4 libbre di materia alcalina per ogni 700 pinte d'acqua; la prima acqua è sì debole che appena vi si sente il sapore alcalinoso mettendola sulla lingua.

« Si raccolgono insieme dieci minugie in un vaso pieno di questa prima acqua; la si cambia quattro volte il giorno; ogni volta si risciacquano i budelli da un capo all'altro e si lasciano alcuni momenti all'asciutto. Tutti i giorni si aumenta la forza dell'acqua, e si mettono le minugie in acqua sempre più forte, aumentando la dose dell'acqua più forte, che si mescola colla più debole.

« Quando le minugie sono digrassate e rese tenere duranti otto giorni con quest'acqua alcalina, si riuniscono per torcerle; non si mettono che 2 budelli uniti per le piccole corde di *mandolino*; 3 per la prima corda di *violino*, 7 per l'ultima; se ne uniscono 120 per le più grosse corde di *contrabasso*; alcune volte sino a 300, ma è per altri usi, e non per gl'istrumenti di musica.

« Per torcere questi budelli si fa una diecina di giri con una ruota a manovella; subito dopo si stendono sul *telaro*, sul quale v'ha un gran numero di caviglie, su cui si fanno passare e si porta il tutto nella stufa.

« La stufa è una piccola stanza lunga da 12 a 15 piedi, ben chiusa, riscaldata moderatamente, in modo da potere far seccare le corde in 24 ore; dapprima si lasciano semplicemente nella stufa, ma poi vi si mette dello zolfo per renderle bianche; occorrono 2 libbre e mezza di zolfo per le 24 ore; lo si accende: brucia per 6 ore, ma il vapore basta anche per dopo; essendo esso chiuso in questa stufa, rende bianche le corde di mano in mano che seccano.

« Quando le corde escono dalla stufa e prima che siano interamente secche, si torcono ancora colla ruota; si asciugano dopo con corde di crine intrecciate grossolanamente e mediante sfregamento.

« Si torcono ancora un poco, solo colla mano, sopratutto le più grosse, e si lasciano seccare interamente; 5 o 6 ore bastano quando fa bel tempo. Si tagliano allora, togliendole dal telaro, e si dà loro 8 palmi o 6 piedi e mezzo di lunghezza, e qualche volte 7 soli palmi; vi si mette un po' d'olio per addolcirle e si arrotolano intorno ad un cilindro di legno.

detto *bussolotto*, per farne piccoli pacchi che si riuniscono in seguito sotto diverse forme ed alle quali si danno diversi nomi.

« L'epoca in cui più si lavora in questo mestiere di *cordaro* è da dopo pasqua sino alla fine d'ottobre, giacchè il calore è favorevole a tale lavoro; le stagioni variabili nelle quali vi è successione di caldo e freddo sono incomode, giacchè si è costretti a rendere l'acqua più forte quando fa più caldo, per prevenire la corruzione.

« Il grado di forza di quest'acqua è la parte più delicata dell'arte; per ben conoscere all'occhio ed al tatto ciò che richiedono le minugie da un giorno all'altro, occorre grande abitudine; si assicura anzi che bisogna essere nati nel mestiero per riuscirvi; la maggior parte degli operai che lavorano a Napoli sono di Salè, villaggio degli Abruzzi, ed il padrone li mantiene e dà loro 21 lira e 8 soldi al mese.

« Domenico Antonio Angelucci, che era stato il più celebre cordaro di Napoli e che morì nel gennaio del 1765, erasi associato con quelli di Roma; ma la cosa non durò molto, e cagionò un gran processo nel quale il suo fratello Felice Angelucci fece molte memorie riguardo a quest'arte, ma non pubblicò nulla.

« Il prezzo delle corde di violino per la Francia e l'Inghilterra è più considerevole che per la Germania; si fanno queste più fine, di qualità inferiore ed a miglior mercato. Il *mazzo* composto di 30 corde a due fili, di sei palmi vale a dire di tirata forestiera, costa 5 carlini o 43 soldi; le altre in proporzione. »

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FURTHER TO:

Comm. 514: Angelo Zaniol writes: "I presume I am one of the 6 recorder makers who took the trouble to reply to Mr. Willoughby's circular letter but 'did not want to answer' his questions about recorder voicing. For this reason Mr. Willoughby has punished us by omitting quoting our names in the list of people whom he wishes to thank 'for being so helpful and answering his questions'. I don't know what kind of reply the other 5 reticent makers have sent to Mr. Willoughby to deserve such a drastic purge, but as far as I am concerned I find this omission quite impolite and inexcusable, unless it has occured because of an oversight. In fact I have consumed a lot of precious time to explain in a three pages typed letter, with my laboured English (for which I apologize to FOLKMI Quarterly's readers: unfortunately I have no time for polishing this language I like so much), the reasons why I could not honestly reply to these questions in an apodictic way, as Mr. Willoughby seemed to expect. I concluded my writing by giving this (I suppose) young apprentice recorder maker some (in my opinion) useful hints to become one day a serious and qualified professional and inviting him to let me know his own point of view about my ideas and my criticisms. Furthermore I put Mr. Willoughby in touch with dr. Claudio Stern, a Londoner physician who plays the recorder very competently and knows a lot of things about recorder voicing and tuning, and gave him some presumably unknown bibliographical references concerning articles on recorder making published in Italian and French magazines. Mr. Willoughby has never deigned to answer me and as a token of his gratitude for my courtesy (who obliged me to reply to his letter? I could behave like those 43 makers who have thrown Mr. Willoughby's epistle into their waste-paper basket!) he has treated me in the aforesaid manner. Never mind, forewarned is forearmed: next time I shall refrain from wasting my time in such a way. Nevertheless I should like to quote some passages of the letter I wrote to Mr. Willoughby, for they could interest other people busying themselves with recorder making:

Dear Mr. Willoughby,

I have received your letter with the enclosed questions about recorder voicing. I do reply to your writing willingly, but I am afraid you will perhaps be a little disappointed with my letter, since there are no precise and univocal answers to your many questions. The fact is that, in my opinion, your questionnaire is not correctly conceived and compiled. [...] I shall try to explain you my point of view, although my poor English makes in no way my purpose easier.

Judging by your questionnaire, you seem to believe that the parameters you have mentioned (and some others you don't speak of, which are also very important, like the an-

ele nt which the airstream hits the edge, the ratio between the cross-sectional areas of windway entrance and windway exit, the alignement or not of the tongue inner ramp at the centre line with the head bore) [The questionnaire Mr. Willoughby sent me contained only the first 18 questions; questions 19-23 have seemingly been added later, perhaps as a consequence of the remarks inserted in my letter] can modify by themselves <u>separately</u> the voicing of a recorder, in a regular and uniform way. If only the matter would be so simple! Everybody (even the mass-working factories like Moeck, Roessler, Mollenhauer, Mopf, Fehr, Coolsma or Dolmetsch) would be able to produce perfectly voiced recorders just by only slightly modifying two or three parameters according to a reliable and well tried prescription-book. Unfortunately the matter is infinitely and incredibly more complex, since every parameter is strictly correlated with all the others, so that its effect may completely change according to the ratio which exists among the other parameters. Note that the variables concerning the sound producing area (voicing) are correlated not only among them, but also with the variables relative to bore shape and dimensions and, in a smaller ratio, with finger holes position, shape and diameter. In other words a first-rate recorder (which only by a miracle could be machinery-made) is the result of a <u>perfect balance</u> of many important variables, and not the consequence of a single feature or particular trick (arched windway, concave windway roof or floor or both, narrow windway, etc.). Jarvin himself noticed, in his invaluable essay "Recorders and English Flutes in European Collections" in <u>GSJ</u>, XXV, 1972, that exactly the same features - for instance a slight and regular concavity in the windway roof or the chamfers on the windway exit - produce different results in different recorder types or specimens ("It seems an individual secret with each instrument...", p. 53). How to succeed in achiving this perfect balance? There is also no easy and simple way! To produce really good recorders, or any other musical instrument, a maker has to possess a lot of qualities, partly natural ones and partly acquired through a lifelong research work in many fields. Another essential quality is humility: an instrument maker <u>must</u> hold in due consideration the opinions, suggestions and criticisms too of the most skilled players of the instruments he makes. I think there is no better way of progressing towards perfection. [...]

That was the most pertinent part of my letter to Mr. Willoughby, the omitted paragraphs containing personal considerations and judgements it is useless to divulge. Now, after having read the answers of so many authoritative 'established' makers (to use Mr. Willoughby's own expression), I am more and more persuaded it is wrong to broach the problem of the recorder voicing as Mr. Willoughby has done. In fact, if we examine the answers given by different makers to the <u>same</u> questions, we can ascertain that in most

cases they contradict one another, in that opposite effects are related to the same cause, which is not very scientific! Examples: 2. Higher windway roof? More flexible / Less flexibility. 3. Lower windway floor? Makes first octave powerful, but bad for the higher notes / Better in upper octave, but not good for low notes. 22. Tapering the windway width? Avoided - deleterious effect / A windway with a slightly progressive taper is probably ideal. Etc. etc.

What can be the upshot of it all? Must we come to the conclusion that recorder makers, or at least some of them, talk (and hence presumably work) at random, without any awareness of what they are doing when making a recorder? Alas, some mad answers seem to confirm such an assumption, and it's a pity that Mr. Willoughby has not indicated, after each answer, its author: in this way it would have been possible to separate the tares from the wheat, i.e. the serious makers from the self-styled ones or the charlatans. But even taking into account only the judicious answers, their sensible discrepancies in matters that should have none prove beyond doubt the questions were naïvely put and hence could not receive univocal answers, just because of their indeterminateness.

To resume and conclude: every research work aiming to throw light on such an intriguing subject as recorder voicing must be welcome; but to avoid beating the air it is indispensable to state the problem correctly. In this specific case, one has to start from the postulate that the recorder voicing (which is a concise term to designate all together several indipendent characteristics of the instrument, such as tone, response or ease of speech, dynamic flexibility, sound volume, carrying power, ease of legato, stability and purity of each note, accessibility of all the potential compass e.s.o.) acts as a system and not a summation of numerous variables, some of which are more crucial than others. It follows that it does not make sense to try to ascertain which may be the effect of a single variable without considering the state of all the others in a particular recorder type or specimen. For instance, it is practically impossible to predict a priori with certainty which will be the effect of chamfering the edges of the windway exit without taking in due account at least the following other parameters: the volume of air which can pass through the windway in unit time (this very important factor depends upon many variables: see on this subject the excellent articles by D.W.J. Osmond, The Optimum Breath Pressure for the Recorder, 1 and 2, in Recorder & Music, vol. V, no. 7, Sept. 1976, pp. 227-230 and no. 8, Dec. 1976, pp. 258-260), the shape of windway roof and floor, the relative position of the block bottom surface (i.e. whether it is in line with the upper windway exit level or not), the shape of the inner and outer ramp, and last but not least the acoustical properties of the bore. This interdependence of so many unforeseeable variables explains why it is so difficult to perfectly voice a recorder, but every maker should regard this as the most exciting aspect of his profession: per aspera ad astra!

THEOBALD-BÖHM-ARCHIV

FoMRHI Comm 530

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Lochhan, 8 March 1984

Notes on Theobald Böhm's article on the open G-sharp key

In 1981, 5 letters of Theobald Böhm to Wilhelm Popp appeared in Sweden by the aid of my research ad in a music journal. In his letter of 5 February 1865, Theobald Böhm discussed in detail the open and closed G-sharp key (original in German):

"Dear Sir, Munich, 5 February 1865

You were right to order a flute from me and not from Lot in Paris, because my completely consequently made key system was only deteriorated in acoustical and mechanical respect by the first flutist Dorus in Paris who made a so-called improvement by a closed G-sharp key. After long consideration, I have made a simple open G-sharp key, because all keys of my flute from E upwards correspond to the natural movement of the fingers as they are closed and opened by the fingers. Dorus thought to make the new flute more accessible to players on the old flute by making a closed G-sharp key as they were accustomed, but he didn't consider that he thus got more disadvantages than advantages.

Lot had made this for him combining the G-sharp key with the A-key. So you get G by pressing down the ring finger of the left hand, as on the old flute, and to get G-sharp you have to press up the G-shar key with the little finger, as on the old flute. However the consequence was, that both tones, G and G-sharp, are produced as on the old flute, whereas in my system, the G is made by closing the G-sharp key with the little finger and the G-sharp is made by lifting this finger. I made it so after long consideration and everybody, who thin the matter over, has to agree with me.

Dorus himself had to confess that he had made a foolishness when I explained him the matter and I also made a foolishness for Dorus' sake, because I didn't immediately at this time explain publicly the inappropriateness of the closed G-sharp. As Dorus was already the first flutist in Paris, of course all his pupils adopted the flute as he played it.

But many accustomed themselves later to the open G-sharp and even De Vroye told me, when I explained him the matter last year, that he was sorry not to be able to make another change, because he of course would have to study thoroughly once more for some time. But as De Vroye now doubtlessly intends to sell flutes with closed G-shar in Germany, because he gets more provision from Lot than from me, I'll most probably explain the matter publicly in the near future. Up to now, I haven't considered it worth while, because in Germany, England, Russia and almost everywhere with the exception of France, all flute players only play according to my system. On the paper enclosed, you will find an explanation of the advantages and disadvantages and you will doubtlessly accept the correctitude of my explanations..."

Yours sincerely,
Th. Boehm."

The version enclosed to that letter is the short version of Theobald Böhm's article on the open G-sharp key. Soon after, he wrote a little more detailed version which still exists as rough copy (Bavarian State Library, Munich) and fair copy(Library of Congress, Washington) and which he translated himself into English (Bavarian State Library, Munich) and into French (Municipal Archives, Munich). Nothing was published, but the matter was treated once more in his book: The Flute and Flute-Playing..., Munich 1871, translated and annotated by Dayton C. Miller, Cleveland 1922, p. 62-71.

Theobald Böhm quotes two reasons, why he didn't take position against the open G-sharp key earlier. First,he highly esteemed Louis Dorus, successor of Jean Louis Tulou at the Paris Conservatory, who adopted the Böhm flute already in 1833 as one of the first and who shortly afterwards changed from open to closed G-sharp by the aid of Louis Lot. Theobald Böhm dedicated him his opus 24 in 1845, the French translation of his book: On the Construction of Flutes and their latest Improvements in 1848, and his opus 35 in 1857, and in his letter to his pupil Sebastian Ott from 3 February 1869, he called him the first flutist of the world.

Second, he didn't consider it necessary to comment publicly on the closed G-sharp key, because with the exception of France, almost everywhere people played open G-sharp. This is also right for America. On 29 November 1854, Böhm's silver flute no. 85 was sent to the flutist Philip Ernst in New York, and in 1864, Edward Martin Heindl (Boston Symphony Orchestra) came to America and achieved great triumphs with Böhm's silver flute no. 19. Theobald Böhm writes in his letter from May 1870 to his friend Walter S. Broadwood:"Since my former pupil Heindl travelled through the United States, I have had more orders than I can execute from America; and though I offered to procure flutes from my friend Lot, at Paris, people prefer to wait for those made by myself."

Nearly all flutes from the workshop of Theobald Böhm (1828 - 1839), Böhm & Greve (1839 - 1847), Theobald Böhm (1847 - 1867) and Böhm & Mendler (1868 - 1888) have open G-sharp key. Only in very few cases, if expressively desired by the customer, Theobald Böhm made a closed G-sharp key, reluctantly and against his conviction. According to his workshop ledger, from 1847 -1859, he made 128 flutes with open and only 2 flutes (no. 2 and 22) with closed G-sharp. Nearly all later flutes have open G-sharp, too.

Today, most flutists play closed G-sharp key with the exception of the Soviet Union, but there is a rising number of eminent flute players who play the Böhm flute in its original form with open G-sharp key.

18 Remarks on the alteration in the system of fingering on Boehm Flutes, made at Paris by changing the simple open g sharp key into a complicated shut one by Theobald Boehm
In: Bayerische Staatsbibliothek München

The principal requisites in a Flute are next to acoustical perfection in tone and tuning, easy playing and simplicity of the mechanism. If and why these objects are better realized with the open or the shut g sharp key, is a question, which must interest all those, who want to play on Boehm-Flutes.

1. Acoustic of the Instrument

By the combination of the shut g sharp key with the open A-key, the g or A-hole can never be opened separatly and as that hole is placed too low on the flute for serving as a vent-hole for the high E, that note becomes impaired in its easy developement in as much, that the emission of it is rendered less sure and delicate than on my flutes with the open g sharp key.

The difference will be found directly in staccato pianissimo or by slurring softly from lower notes as up to that E.

2. Easy playing

By the same combination, the play is more difficult on two accounts. As shut keys require strong springs for stopping large holes airtight, the B finger of the left hand wants, compared to my open key, more than double strength of muscle to overcome at the same time the strong spring of the g sharp key.

Therefore the play is not only more difficult in all instances, where the a-hole must be closed, but good shakes on several notes as g sharp with a, and A♭ with B♭ in the first two octaves, D sharp with E and E♭ with F - are nearly impossible without extraordinary strength of muscle or immense practise.

3. Simplicity of key-mechanism

As the difficulty of keeping a key-mechanism in good order is increased in proportion to its complication and frequency of use, the two combinations in my system of fingering by F sharp and B♮ are only justified by the impossibility of stopping 11 hole with 9 fingers.

Farther are the motions of the little finger of the left hand allways contrary with those of all fingers of the right hand, whenever g sharp or A♭ is to be changed with notes of the right hand, and as nobody will deny that conform motions at the same time with fingers of both hands are easier than contrary ones, the play with the shut g sharp key is considerably more difficult than with the open key. It might be here objected, that the play is more easy in several tunes, where the g sharp or A♭, consequently the little finger of the left hand, is not wanted at all.

This is very true, but as the g sharp or A♭ is wanted in all scales and all sorts of passages in 16 tunes out of 24, and as in our days a good fluteplayer must be able to play well and correct not only in some but in all tunes, it is necessary that all fingers are practised alike, and this is being the case on my flute, that little finger will soon get the required agility, as the open g sharp key moves very easy.

But as the little finger of the right hand has nothing else to do, than to manage the g sharp key, there was no necessity for making a third

complicated combination which - rationally considered - is detrimental in every respect - in acoustic, easy playing and simplicity of mechanism.

Even the assertion, made by some defenders of the shut g sharp key, that with this key the study of the new flute becomes less difficult to players on the old flute - is only illusory. The study of the new flute can not be made correctly without a slow practise continued for some time, and experience has proved that all my pupils who had played on old flutes and who began the study of my flute without prejudice, had aquired the use of the open g sharp key with all the rest not only at the same time but also quite insensibly, and many artists and amateurs, who had already played on Boehm flutes with the shut gsharp key have thanked me in word and writing, for having persuaded them to undergo the trouble of changing, as they after a very short time found out the great and many advantages of the open g sharp key.

That difficulties of more or less important can be overcome by extraordinary talent and diligence is proved by other players on the flute with the shut g sharp key and great artists at Paris and elsewhere, who play with the shut g sharp key, but it is not at all proved that they could not have aquired the same excellence with less trouble or even gone beyond it with the open key.

I sketched out many years ago my system of fingering, I had weighed scrupulously every pro and contra, I had tried and practised every part of the mechanism myself before I adopted it because I wanted to choose the best, and if any one will honour me with rational critics on my system I shall allways be happy in answering them or in adopting improvements.

FoMRHI Comm 531

The Mary Rose Shawm/Dulcina — Graham Lyndon-Jones

To my knowledge, four people have made instruments based on the drawing published in "Early Music". Of these, three are professional makers, and at least two are offering "copies" of the Mary Rose "dulcina" for sale to the public. It seems somewhat premature to offer copies of an instrument about which we have no bore information! I am assured by Dr Rule that work is about to start on the instrument and that detailed measurements will be available in due course, so in the meantime, I would like to add my ideas to the growing pile of speculation:

The only known (albeit approximate) measurements of the bore have been taken at each end, the top diameter presumably being the top of the crook socket. It has, on this basis, been described as "presumably cylindrical". However, I suspect that the gently tapering outside shape (shown on the original archaeological sketch) could, in true renaissance tradition, reflect a gently tapering bore. The tone holes are ideally placed for a bumbarde/pommer/nicolo shawm pitched at the customary 5th below the tenor in g (altpommer). The fish-tailed key would close to give c and the second key to give G. The extra tone hole for the left little finger could help to tune g, allowing hole IV to be smaller and lower, and might well give an alternative or improved fingering for f-sharp. The existence of a thumb hole is not conclusive evidence of a cylindrical bore; it is found on conical chanters in some bagpipes. I have personally found it very useful on my conjectural, "medieval-style" bumbardes in c.

It is surely more likely that a shawm rather than a cornamuse would be used on board ship/ I certainly hope that the rest of the band will come to light as the dig continues.

FoMRHI Comm 532

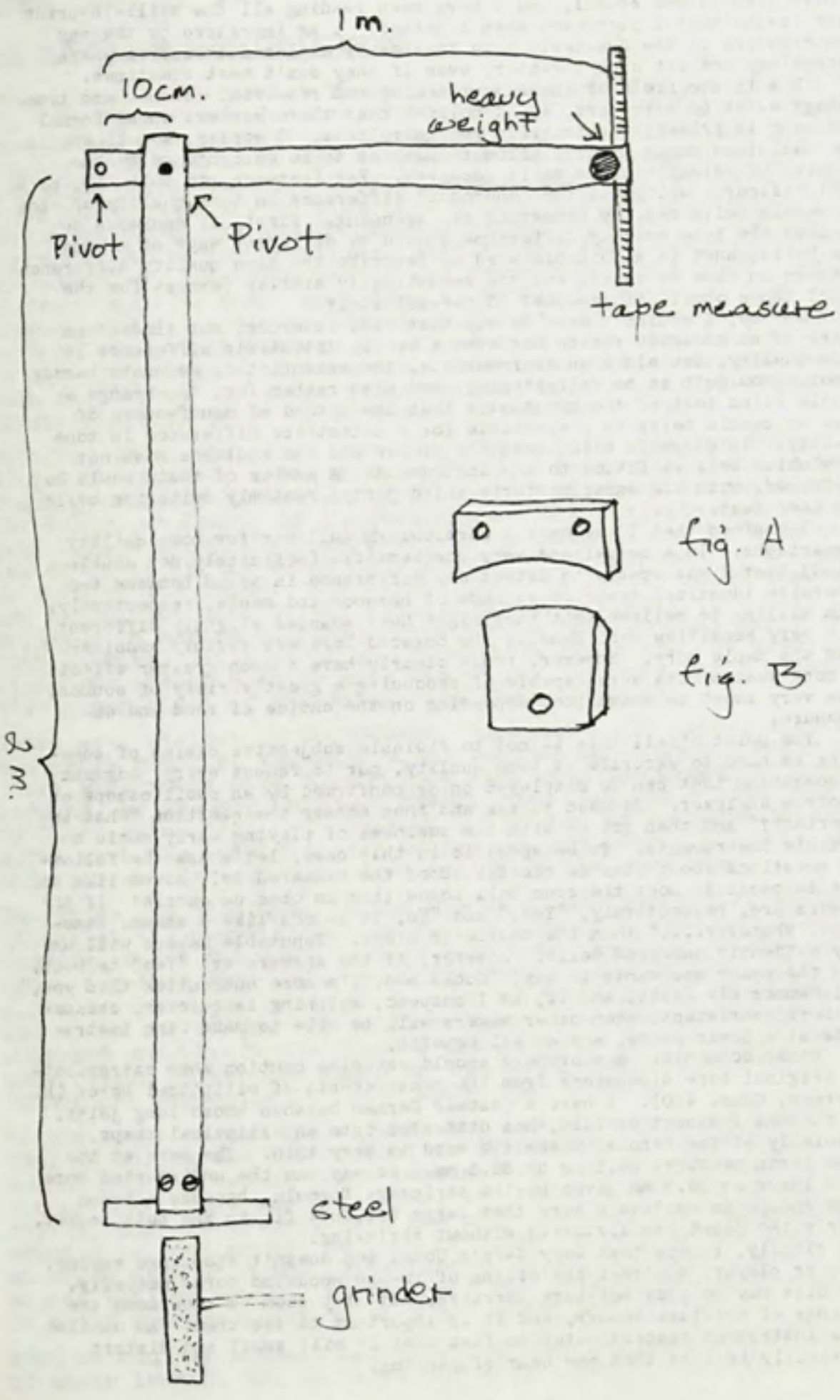
The Fornication of Recorder Windways

"My joy, my grief, my hope, my love
Did all within this circle move
A narrow compass! and yet there
Dwelt all that's good and all that's fair."

The sound and playing characteristics of recorders are relatively insensative to small changes in transverse windway curvature. A flat edge and windway give a sound innocently poor in overtones and feeling somewhat unresonant and unsteady. A curve following the bore gives rich overtones and a resonant solidity, especially of low notes (while the upper ones get noisy); but this lushness is thin and lacking in character. I suspect this all comes from the difference in effective wall thickness and the angle bwtween edge and window sides. To control the compromise curvature (half that of the maximum bore in most renaissance instruments) I use two templates. The concave (fig.A) is for the block and is wider than the windway. It's turned from brass (1 1/2 mm sheet) screwed to a particle board faceplate and turned from the inside to the desired diameter (it can be done by hand). The positive (fig.B) is for the edge underside and windway roof and is slightly narrower than the windway. It's of 1mm tool steel sheet, filed and stoned to shape using the brass negative on a light table (glass and diffusing paper over a light bulb). It's hardened and has a bevelled, sharp edge, and a hole to screw it to the end of a rod. With light behind them, they are accurate gages. The positive can do some scraping, especially in corners, and when wiggled against the wood will leave marks where the surface is high.

Longitudinal curvature is more critical. While focussing the lower notes into a rich, resonant solidity, it will make upper notes harshly (not breathily) noisy. A good compromise seems a radius of curvature of 2 meters. For a windway 60mm long, this is a deviation from a straight line of some .2 mm. Whether the effect comes from the curve itself or the new angle of the airstream as it exits, I don't know. The exit angle is the same as with a flat windway .9 mm "higher" at the blowing end. But with a similar concavity also on the block, there's still the same effect without an apparent change in angle. To control this curve, as well as to find irregularities (the longitudinal ones seem more important than the transverse ones, except at the very exit), I use another template. It's a curve-edge straightedge of 1 mm flat-ground tool steel (1 1/2 mm for basses). I grind it against a grinding wheel clamped to a table, using a wooden board as a swing-arm 2 m long. The board is 19x67 mm, slotted in the end for the straightedge, which is clamped with two screws behind it. It pivots around a nail set in another board, 10 cm from its end, which in turn pivots around a bolt set in the table. The other end of this adjustment arm, 1 m long, rests on a tape measure clamped to the table. A hefty weight holds it down. Tapping this end forward by 1/2 mm advances the straightedge .05 mm against the grinder. Lubricate the grinder end of the board with wax so it slides easily over the grinder's tool rest (or whatever it rests upon). Swing the straightedge back and forth, holding it by its ends for support (it usually cuts more "to" than "fro"). Tap forward by another .05 mm and repeat. Flash and sharp edges should be taken off with a hand stone or file. A special pencil (for "glass, plastic, metal"), when rubbed on the template, will rub off on the windway's high spots. Or you can see where it pivots and rocks.

Bob Marvin


1m.
10cm.
heavy weight
Pivot
Pivot
tape measure
fig. A
fig. B
2m.
steel
grinder

I have just joined FoMRHI, and I have been reading all the still-in-print back issues that I purchased when I joined. I am impressed by the way contributors to the Quarterly have fearlessly explored this area where technology and art come together, even if they don't meet sometimes.

Now in the field of instrument making and research, science and technology exist to serve art, and I believe that those members whose formal training is primarily scientific recognize this. I wonder, sometimes, if the musicians among us will allow themselves to be enlightened by the results of scientifically valid research. For instance, in bull. 13, p. 9 Paul Hailperin writes of the "enormous" difference in tone quality of oboe da caccia bells made by hammering vs. spinning. First, if enormous describes the tone quality difference caused by different ways of making the bells, what is a suitable word to describe the tone quality difference between an oboe da caccia and the acoustically similar (except for the bell) tenor oboe? Stupendous? Super-colossal?

Anyway, I wouldn't dare to say that Paul is wrong, but since I am aware of no acoustic reason for even a barely detectible difference in tone quality, let alone an enormous one, the scientist in me wants harder proof. Wouldn't it be enlightening, and also rather fun, to arrange a double blind test of the hypothesis that the method of manufacture of oboe da caccia bells is responsible for a detectible difference in tone quality. In a double blind test the player and the audience must not know which bell is fitted to the instrument. A number of tests would be performed, with the experimenter(a third party) randomly switching bells for each test.

I confess that I may have a particularly dull ear for tone quality comparisons. In a casual and very unscientific (definitely not double blind) test I was unable to detect any difference in sound between two otherwise identical tenor oboes made of boxwood and maple, respectively. I am willing to believe that they might have sounded slightly different to a very sensitive ear, because the boxwood bore was visibly smoother than the maple bore. However, reeds clearly have a much greater effect, as both instruments were capable of producing a great variety of sounds, from very sweet to shawmlike, depending on the choice of reed and embouchure.

The point of all this is not to ridicule subjective claims of something as hard to describe as tone quality, nor to reduce every judgment to something that can be displayed on or confirmed by an oscilloscope or spectrum analyzer. We need to ask and then answer the question "What is important?" and then get on with the business of playing early music on suitable instruments. To be specific in this case, let's ask the following questions about oboi da caccia: Does the hammered bell sound like an oboe da caccia? Does the spun bell sound like an oboe da caccia? If the answers are, respectively, "Yes," and "No, it sounds like a shawm, saxophone, whatever...," then the course is clear. Reputable makers will use only authentic hammered bells. However, if the answers are "Yes" to both, then the maker who wants to say, "Sucks boo, I'm more authentick then you," will hammer his bells, and if, as I suspect, spinning is quicker, cheaper and more consistent, then other makers will be able to make fine instruments at a lower price, and we all benefit.

Other comments: Researchers should exercise caution when extrapolating original bore dimensions from the measurements of elliptical bores (E. Segerman, Comm. 460). I have a postwar German bassoon whose long joint, for reasons I cannot explain, has distorted into an elliptical shape, especially at the tenons, where the wood is very thin. The bore at the large tenon measures 34.1 mm by 36.5 mm. No way can the undistorted bore be as large as 38.9 mm given by the shrinkage formula, because a tenon large enough to enclose a bore that large wouldn't fit in the bell socket. Clearly the joint has distorted without shrinking.

Finally, I hope that Cary Carp's Comm. 406 doesn't encourage anyone, maker or player, to treat the oiling of in-use woodwind bores casually. Bore oils may be poor moisture barriers, but they seem to slow down the exchange of moisture enough, and it is important to use them. An unoiled maple instrument absorbs water so fast that it will swell and distort drastically in less than one hour of playing.

FoMRHI Comm. No. 534 Jeremy Montagu

THE OLDEST ORGAN IN CHRISTENDOM

While I was in Jerusalem three weeks ago I had the privilege, though the kindness of the Curator, Father Michel Piccirillo, of examing in some detail the collection of organ pipes in the Studium Biblicum Franciscanum Museum in the Convent of the Flagellation in the Via Dolorosa in the Old City of Jerusalem. What follows is the most preliminary of reports; it will take a considerable time to make sense of the measurements and for Bathya Bayer, who first showed me the pipes, to write the historical part of the full-scale article that we are planning. The main reason for producing even a preliminary report at this stage is that, according to Father Piccirillo, I am 'the hundred-and-first person to take measurements of the pipes' and yet, to my knowledge, this will be the first time that they have been reported in the organological literature. Previous publication has been in such sources as the Revue Biblique and, most recently, B.Bagatti, Gli Antichi Edifici Sacri di Betlemme, Jerusalem, 1952.

Briefly, then, the pipes were discovered while digging for construction work in 1906, along with some bells (a couple of bells had been found previously in 1863). There has always been a tradition that the bells, at least, of the Basilica of the Nativity in Bethlehem had been buried after their use had been prohibited in the 15th century, and there is little doubt that the same had happened to the pipes, if no more of the organ. Similarly, there is little doubt that both pipes and bells date back to the Latin Kingdom, probably (but this is where Dr.Bayer is hoping to find more concrete information) early in the 12th century. If this is so, then these pipes are, by several centuries, the oldest that we have except for the very small pipes (portative organ size) of the Roman organ from Aquincum.

There are, visible in the Museum, just under 220 pipes; according to the early reports, 251 were found, and so far I am not clear whether there were other bits in addition that were too broken to be worth keeping, or whether what was thrown away came out of the 251; certainly there is no trace of anything but pipes; no woodwork or other metal work has survived, nor so far can any report be found that might indicate whether any such were dug up at the same time.

The pipes are displayed in the Museum in an inverted V, as in illustrations of the central part of late mediaeval organs (eg Arnault's drawing, Med & Ren pl.50 and in many other books), in five ranks, so close together that only the first rank is accessible. There are 49 pipes in the first rank, 42 in each of the second, third and fourth, and 43 in the fifth. In addition there are some broken pipes in a cupboard underneath the display and at least one pipe, and perhaps more, lying betwen the ranks on the boards that hold them in position (hence the vague figure 'just under 220' above).

Of the pipes in the front rank, the shortest speaking length (lip to top) is 16.8cm and the longest is 58.8cm (the longest pipe in the second rank is two or three centimetres longer; the central pipes in the further ranks may be longer, but because one cannot get at the mouths, nor see exactly even how high the board on which they are mounted is, one cannot be sure of this; it is possible that we have an organ with 4' C the lowest note. Also, of course, there is no way of telling whether we have all the organ pipes or whether there is still another hoard to be found under the ground).

What we can say without any doubt is that all the pipes, irrespective of their length, are of about the same diameter (about because none

are in new condition; all are somewhat battered and dented), between 28 and 29mm; there is no scaling at all. Also that all the pipes were made, presumably by rolling the metal on a mandrel, with an overlap which now shows no signs of solder, which is reminiscent of the Aquincum pipes save that here the overlap is 3-5mm deep (probably much the same proportionately to the circumference as those at Aquincum; the pipes there are not much more than pencil thickness). That the pipes were made in one piece, unlike those at Aquincum, which were joined at the mouth, ie with foot and body made in two separate pieces. That the mouths are rectangular, or nearly so - some are a fraction higher at one side than at the other (again unlike Aquincum, where the lips are curved so that the cut-up or mouth looks like a D resting on its straight side). That the metal, in the vast majority of cases is either copper or a copper alloy; that is to say, all the high spots, where the corrosion has been rubbed off in cleaning, and in one case which appears to have been chemically cleaned, the whole pipe, are copper-coloured. I say 'in the vast majority of cases' because there are half a dozen pipes whose metal is white; one was accessible, and it weighed only about half as much as a copper pipe of similar size. I have been back so short a time that I've not yet had time to look up any table of metals to compare the specific gravities of copper (or bronze) and, for example, tin. The pipe that appeared to have been chemically cleaned showed scraping marks, apparently original and quite deep, almost like a wood grain. Metal thickness varied quite considerably, from about 0.45mm to 0.9mm (much fuller detail will follow in due course).

All these facts confirm a hypothesis on the date. Certainly what we have here is far older than Arnault's treatise, for instance. What I now have to do is to tabulate and make sense of the pipe lengths (I have a suspicion that we may have something that would correspond to the description of the Winchester organ; there are groups of pipes of either the same length or very nearly the same length) and go through all the early organ building treatises to see just what information in them can belinked to what we have, and then write the thing up properly. Meanwhile, at least you know that it exists and where it can be seen (the Museum is open weekdays from 9 am to 11.30) and, if you arr really pushed for information, that I have some.

I will let you know, of course, when a proper publication appears; it is not likely to be here, partly because it should be in a journal of record, which we don't purport to be, and partly because it ought to be somewhere where organ people will see it, since it is them it most closely concerns.

FoMRHI Comm. No 535

USING THE PITCHMETER & DIGITUNER by Dennis & Margaret Crowe

The Pitchmeter is battery operated, has an analogue meter indication, control for chromatic scale, on-off indicator light, and green light which glows when the memory is locked on.

The Digituner is battery operated, with on-off switch which also controls sensitivity, giving response to weak notes in quiet conditions at one extreme, and elimination of background noise when necessary at the other. There are controls giving the chromatic scale and octaves.

When a note is sounded, figures appear as a digital read-out with plus sign if sharp, minus if flat and 00 on tune at A 440. To obtain other pitches a table is given at the back of the instruction booklet, together with alterations for Common Meantone, Werkmeister 3 and Kirnberger 3. Margaret has also used John Barnes as given in Early Music, April 1979, and various other tunings (e.g. Rameau).

The Pitchmeter is quicker in use, because one can turn the tuning key whilst sounding the note and can see the needle move with it. The Digituner's figures move, but one has to wait until the memory locks (a dot on the left of the figures) before knowing exactly where one is. This makes for quite a slow tuning. However, it is about half the price of the Pitchmeter, and can be invaluable for stringing a keyboard instrument.

We have a Digituner because we couldn't afford the Pitchmeter, but the latter was bliss to use. One needed to write down all conversions, as otherwise one gets in a muddle, but having done that, one can whizz up and down the keyboard fairly quickly.

Dennis uses the Digituner fully for stringing his harpsichords. Margaret merely sets the temperament and finishes by ear. However, when testing it by tuning everything from it, it was very difficult to get the upper 4 fts nearer than 2 cents, which sounded perfectly in tune to us. We were relieved to be told that the human ear cannot detect the 2 cents difference.

There is also an optional extra which renders the instrument impervious to all background noises, and enabling tuning during intervals of concerts and operas, for example.

The Pitchmeter, just over £400, and Digituner, £160 plus VAT, are available from Clavitune Ltd, 24 Adelaide Square, Windsor, Berks, or Heckscher & Co., 75 Bayham Street, London NW1 0AA, and can be used for all instruments.

We gratefully acknowledge the loan and use of the Pitchmeter by Clavitune Ltd.

FoMRHI Comm. no. 536 Putasne intelligis quae legis? —

Some thoughts on the use of Renaissance legends

I begin with a hilarious piece of numismatic history. King Offa of Mercia, who introduced the silver penny to England, also struck a gold coin made in close imitation of an Arab dinar of 774. His new coin bore, in addition to the legend OFFA REX, the Arabic inscription of its model. Why did the royal minters reproduce this inscription, clearly without understanding it? They did so in order to demonstrate the propriety and genuineness of their own artifacts — or, as we should say, in order to appear authentic. Now we can smile at the Anglo-Saxon coiners, but it strikes me that some of us ought to be smiling at ourselves. For in painting Renaissance mottos on our instruments in blind, uncomprehending imitation of the early makers, we are begging the Philippic question that I have used for title: "Understandest thou what thou readest (never mind writest)?"

Imagine the following Platonic dialogue between a Liverpool harpsichord-maker and a Socratic customer.

Q. What are you painting on the lid of that harpsichord?
A. Sic transit gloria mundi.
Q. What's that?
A. It's Latin for "thus passes earthly glory." Thomas à Kempis.
Q. Why put that on your instrument? Are you concerned to preach the transience of life? Did you warn your milkman about transient life this morning?
A. No, of course not. I'm only following the practice of the early makers. I don't even know why they used mottos like this.
Q. But did they know why they used them?
A. Certainly.
Q. Then is it really authentic to parrot automatically and in ignorance something that was written after free choice and for a good
A. It is not — it can't be. (reason?
Q. Would it not be more authentic, more honest, to inscribe a motto in which you personally believed, or whose use at least you could personally understand?
A. Yes, of course. But who'll buy my harpsichord if I paint on it a motto like Liverpool are champions?

Seriously, did Ruckers and all the other legend-writing makers understand why and what they were writing? Of course they did. But for a modern to understand their practice requires him to immerse himself for a long period in Renaissance music, plastic art, and above all literature. There are no formulaic one-liners that allow one to see into the "Renaissance mind" (as if there could be such a thing!); glib textbook definitions are worse than useless. More, the understanding that will come from such studious immersion as I have prescribed will be, by its very nature, incommunicable. Nevertheless, if we are not to deceive both our customers and ourselves, we must study to understand the legends that we insist on reproducing.

I have raised this whole matter of legends because I regard it as important and significant. We are makers of musical instruments, not of machines: and we should be at pains to understand, not merely to copy, what was done of old. If our authenticity is not of the mind as well as of the hand, then we are worthy children of King Offa's coiners.

David Z. Crookes

FoMRHI Comm 537

FLEMISH 'TRANSPOSING' HARPSICHORDS - SOME REJOINDERS ANSWER'D

R.T.Shann

For the past three or four years I have been promoting the notion that the so-called Flemish 'transposing' double harpsichords were not for transposing, but for contrasting, and that the alignment of the keys had more to do with the ease with which the players transposed than the reverse. Most of the arguments are presented in my article in the current Galpin Society Journal, and won't be repeated here: what follows is some objections that have been made, and ones I've dreamt up and so on. (Reprints of the GSJ article are available from me; SAE please).

Firstly,in the article I say 'let us put aside the question of alignment as of secondary importance': fair enough, the main idea was contrasting timbre, but in the end a choice must be made: why not have the keyboards aligned? In terms of the conventional C/E short octave keyboards it would have been possible to build both keyboards as C/E - f''' at a fourth below the pitch of the 6-voeter. My own feeling is that this was not done for conceptual/traditional reasons: the instrument was a 6-voeter and an 8-voeter in one box. However it is also possible to imagine that there were some small advantages (such as the extension of the number of possible keys or the short octave arrangement being available at two different pitches. This last feature might be thought desirable by people brought up on the short octave. What is rather intriguing is that there is actually a piece (a chaconne in D-minor by Louis Couperin, no. 54 in Curtis's edition) which strictly speaking demands such a feature: it can be played (sounding in A-minor) with the 8' set on the upper and the 4' set on the lower of the ordinary Ruckers double. Without this arrangement the return of the refrain a fifth higher requires an impossible stretch. I wouldn't rate this as more than intriguing, but the timing is right: Louis Couperin must have written this at about the time that the new double harpsichords with an extra set of strings were becoming available in Paris: so it is perfectly possible that he was using the ordinary sort of double in which the keyboards share the same strings, and are, incidentally, a fourth apart.

This discussion of the pros and cons of unaligned keyboards becomes more complicated with the chromatic bass doubles; and if one looks at the Couchet double made at the end of the mass production era (1646, see N. Meeus's article in the Brussels Museum Bulletin) then another argument becomes plausible: although the two manuals were designed to provide contrasts in tone colour, the choice over keyboard alignment was made with an eye to the frequent call for transpositions. I don't suppose this sort of consideration had much to do with the original design of the doubles in the last quarter of the 16th century, but it is possible that the continued popularity of the arrangement was set against a subtly shifting pattern af usage. On the one hand we would have professional musicians who would exploit the tonal differences fully, restricted only by the need to avoid impossible accidentals (d-sharp, a-flat etc). On the other hand, and perhaps increasingly towards mid-century, there

were those who depended on substituting imagined clefs for real ones in order to transpose; in this case the easy transpositions are a fifth up or a fifth down, obtained by substituting each clef with the next clef up or down. Normally the written tessitura of the piece would allow only one of these transpositions to be visualised easily, for example a piece written rather high, with perhaps a C-clef in the bass part could be played a fifth lower imagining an F-clef there. But to get a fourth lower transposition by shifting the clefs the other way and then moving an octave at the keyboard would have been tricky, so simply resorting to the lower manual, (regardless of tonal effects) may have seemed inviting: certainly whatever level of transposition seems easy to you, these doubles will make one more available.
Before leaving this whole question of possible transposing uses for the Ruckers double I would like to acknowledge my indebtedness to Nicholas Meeus, who suggested the possibility of the 'transposer' being a dual purpose instrument to me when I first aired the 'contrasting' theory of the transposer in 1980, and to Eph Segerman for the evidence and arguments concerning transposition-by-clef-change.

It's been suggested that the contrast between the manuals of the Ruckers double isn't great enough; the jacks are after all put as close together as they could be (without taking the all too easy step of using the same jacks for both manuals). I was inclined to entertain this idea until firstly the theoretical analyses (given in GSJ) and then the actual hands-on experience of stringing and voicing a 'transposer' convinced me otherwise: to be sure the outlandish qualities of some of the 18th century contrasting stops (the lute stop or the peau de buffle) are not represented, but these are more by way of novelty stops (like the sustain pedal on the fortepiano), which become tiresome if used continually. All the stops on the Ruckers double can be used as musical instruments on their own, and the contrast between the manuals is really quite amazing. (Remember that it is not merely the 8' which is plucked differently, but the 4' as well). Players have also remarked on the physical difference between the keyboards, the lower manual having more inertia.
Before leaving the question of the contrasting plucking points, one point in the GSJ article is badly expressed: in concentrating on the 14 inch string, I didn't make it sufficiently clear that the double harpsichord has two 14 inch strings, and hence four different tonal qualities for the same actual pitch.

One point glossed over in the article concerns the sharing of jacks by the two manuals which would have been the natural approach to constructing a transposer (always assuming one was determined to make two separate keyboards). I must confess I was trying to avoid muddying the water. If the jacks were shared, then the matter of providing extra strings for the e-flat/g-sharp note would arise. Evidently one could simply retune on the occasions when the note is called for, but if this was to be avoided the additional strings could have been included in the string band in the manner adopted by the Italian builders of split sharp instruments. However this line of reasoning is only worth chasing down (eg, were the Italian split sharp instruments already invented when the 'transposing' doubles were devised?) if one is still trying to see this double as basically for transposing.

Lastly Italian instriuments: the evidence concerning Italian double harpsichords with a 4' on the upper manual is much shakier than I thought when I wrote the article. Denzil Wraight (private communication) tells me he hasn't seen any genuine ones, and he has of course seen a few Italian harpsichords! In fact the general scarcity of genuine Italian double manual harpsichords is evidence that they weren't thought of as transposition aids, since one might expect such a useful (? wealthy amateurs) device to be made in Italy as well. If the double is for providing variations in registration, however, then it is no wonder it was largely ignored by the Italian makers.