THE BRAILLISTS FOUNDATION

BRAILLECAST PODCAST EXTRA 41

Care and Usage of your Perkins Brailler

15th March 2022

Matthew Horspool: Welcome back to Braillecast Extra. My name is Matthew Horspool and coming up this time, Care and Usage of your Perkins Brailler.

 This session was recorded on Tuesday, 15th March 2022 and introduced by Dave Williams.

Dave Williams: Hello, good evening, and a very warm welcome back to the Braillists Foundation.

 This evening we will be exploring all things Perkins braille writer, the means by which many a blind person over the last 70 years or so has learned to write the braille code. These machines are used everywhere, from primary schools right the way through to older people. We certainly have one or two kicking around here in my home and the brailler, even with the wave of technology, braille displays and many other devices besides, has stood the test of time. The Classic Perkins brailler is a very robust, well-designed piece of equipment, that, with a bit of TLC, will serve you well for many a year.

 Joining us this evening to guide us in how we go about using the Perkins brailler, how do we set it up, how do we load the paper and how do we look after it, how do we take care of it when things go wrong, is our friend of the Braillists Foundation and a gentleman who himself runs a business where he is certified now to perform maintenance and repairs on the Perkins brailler, good evening to you, Alan Thorpe.

Alan Thorpe: Good evening, Dave. And good evening to everybody.

 So, I've made a few notes of areas to cover, starting from finding your way around a Perkins. I have one here on the desk in front of me, so let's have a [bell] ring of the bell and stuff.

 If you are familiar with the Perkins or if not, think of it as like the good old-fashioned typewriter. You've got a set of keys at the front and a means of putting paper in from the top back.

 When we have a Perkins sat in front of us, be careful, they are approximately 6kg in weight.

 We have a range of nine keys in front of us and I'll come back and talk about what the keys are shortly. Above the keys we have our carriage or thumb slide, which actually moves across the page. On the very top of the machine, we have the handle for picking it up and carrying it. On the two ends, or two sides, we have the knobs for rolling the paper in. Moving towards the back, and the very top back, we have two little arms or things that we call ears or levers, to actually operate the paper clamp. Just falling over the top with those, we might have a roller which is grooved, a metal roller, basically at braille cell intervals, or it might be a longer bar with rubber O-rings on. Just beneath that, there's a big black rubber roller and a gap, where the embossing head moves from side to side. And going over the back, you might feel a long slot, which actually accommodates the adjustment for the actual margins.

 There are a couple of little other things on the back. At the back left-hand corner, we have a round knurled screw type nut something, that's a paper stop. It sits on a wooden board, a fibre board underneath and can come in a range of colours and very slight modifications on the casing, dependent on how old your machine is.

 To go to the keys and actual functions of things, we'll come back to the front of the machine. We have a series of nine key stroke buttons. In the very middle we have one which is sort of like a T shape, maybe an upside-down T. That is a spacebar. To the left of the spacebar, is dot 1, to the left of that is dot 2, and to the left of that is dot 3, which you would use your index finger, your middle finger and your ring finger on your left hand. A little bit higher and further to the left, we have the new line key. So, pressing the new line key [clicks] on that side.

 Go back to the spacebar, and to the right of the spacebar, we have dot 4, to the right of that, we have dot 5, and to the right of that, we have dot 6, using your index finger, your middle finger and ring finger on your right hand. Like the new line, slightly more to the right and up, we have the backspace.

 The thumb slide or carriage is the strange shaped thing, which is sort of bouncy at the right-hand end. That moves along as we're pressing the spacebar [clicks/bell] and when we get to the bell, we can just push the embossing head, the line, whatever we'd like to call it, back to the beginning, but if you're actually wanting to move halfway along the page, instead of space, space, space a number of times, you can actually press the right-hand end of that thumb slide, on its little spring, press it down and it will [bell] potentially slide to the right on its own. I say potentially, because if your machine is in need of a service, it might be a bit sluggish and need encouragement to move over to the right.

 Then we have the paper release levers, which are sticking up through the top plane. They should be all the way back at any point for actual use unless we're inserting paper. They lift a little device called the paper check and it's a paper check that tells us that we've actually got to the top of the page, when we're actually rolling the paper into the machine. For example, if we wanted to put paper in the machine, the little levers have got to be all the way back, and if you try to turn the paper roller knobs on either end, you shouldn't be able to move them. They should be locked in a position. That means the paper clamp is in the correct place on the drum to actually accept all the paper, but we'll come back to that a little bit more, later.

 Over the back of the machine, or if you actually turn it round, so you've got the back facing you, on the vertical back, we have this long slot that I mentioned before, where it's two pieces. It's sort of a flat plate on the top and a little round bobble underneath. We squeeze those together and we're allowed to move [bell] the margins backwards and forwards and we can go to the left-hand side and the right-hand side, so if you were writing, say, in a birthday card, if it fitted in the card, as a normal book type opening card, but you wanted all your lines to start in the same place, we can actually move the embossing head to be on the centre fold, move the left margin to where we want to be. So, every time we then move our embossing head back towards the beginning of the line, they'll all start in the same place.

 The right-hand margin has, in the groove at the top where the two rollers are, a little lug. The little lug, you actually squeeze the two pieces together on the back, and that little lug will slide along until it moves to the edge of your piece of paper. Now, if you're using standard Perkins-sized paper, it's irrelevant where it is. But if you're using A4 paper, or index cards or something, you might want to move it so that little lug is level with the right-hand side of your piece of paper, because when you're writing and going along, you should hear the bell five or six spaces before the actual end of the page, before you've run out of room and started writing in fresh air.

 The little knurled knob which is on the back left, that only moves probably a centimetre, maximum. Generally for Perkins size paper, it wants to be as far to the left-hand side of the machine as possible, which will give us more room to get our larger sized pieces of paper in there. If we're using A4 paper, we get a bit more leeway on the use of that, and that is there because, thinking about rolling paper, and especially if it's punched, punched holes aren't always a set distance from the left-hand side of the margin. If you're rolling paper into the machine and you suddenly find that it's only gone in partway and then it stops and won't roll anymore, that's because the paper-out detector has actually detected the hole in the paper. If you're using the same sized paper constantly, you don't want to be messing about, trying to lift the little levers to get it past it and be able to rotate it in. So, the little knurled screw has this bit of movement, so that you can actually adjust how far the paper is pushed over to the left, so it could potentially miss those punched holes.

 Hopefully, that's covered finding your way around and the actual key layout.

 So, we want to put paper into our Perkins. Remember what I said, if those little ears are all the way back, let me just grab this piece of paper, you should not be able to move your rollers. I don't know how much can hear, but I'm just rocking it backwards and forwards and it's only rocking fractionally. So, it means we're in the right position to put paper in.

 First thing is, lift the paper release levers, paper clamp levers, ears, whatever we want to call them [clunk], pull them forward, get our piece of paper and slide it in, sort of parallel with the desk, coming in from the back of the machine in between the two rollers. So, one being a grooved metal roller with possible rubber rings on it, and the other one being a big rubber roller. Once we've got it in position and it wants to be to the left of the actual space where the paper goes in, because if it's to the right slightly, the paper detector will not see the paper, so then you'll not be able to roll the paper in.

 Once we've got it in the right position, we can roll the paper in and I'm doing that and unfortunately this is a machine I've been servicing earlier, so it's not clunking and grinding. Roll the paper in, until it actually gets to the point of where the paper will not roll anymore. If the paper rolls all the way in the machine, your paper detector needs some attention, and then you've got to try and fish it all out.

 Once we've got the paper rolled in, we press the down or the new line key which is the front far left key, twice preferably. Once sort of lines the whole thing up, but it's still going to be very close to your top margin, so twice does help. And we're ready to write.

 I need to set my right-hand margin, so squeezing the little bits together, we'll move the little tag along until it's to the edge of the paper and then releasing it and just giving it a little encouragement to slide backwards and forwards, so that it locks in position. So, now, I can actually write along my page [clunking]. Soon, now, [bell] we have the bell. So, I now should have one, two, three, four, five, six characters or six spaces to write characters, to decide whether I want to cram the word in on the line and hyphenate it, or decide, no, I want it all nice and starting with a full word on the next line.

 So, we've done all our writing on that line, so then new line and back to the beginning of the next line.

 These parts get all sorts of names. Certainly, when people ring me up and want to talk about their machine if it's not working, they'll say, for example, "the paper up button". It's fine, I understand. It is in effect a new line, but it can be paper up. They say "the slidy thing" which is the carriage return and the embossing head. There are all sorts of weird and wonderful things and there are terms used and predominantly part numbers are used, rather than the actual words for them, in the work that I do.

 Let me take that piece of paper back out, because that's got all my notes on, for what I'm supposed to be talking about.

 Caring for the Perkins. People ask me all sorts of questions about how to store it. Keep it covered, if you can. You don't have to have a special Perkins dust cover. You can use a tea towel, a pillowcase or something just to try and stop dust and dirt falling into them. One common thing is guide dog fluff. That blows around and lands on the machines. Some people ask if they should store it with paper in it or not and where should the carriage be. If the machine is going to be put away into long-term storage, it is recommended to put a strip of paper into the paper clamp, something the width of a piece of paper, but maybe only 2" or 3" long, just a bit of something to stop the clamps sticking together. I can't see that it has any other function, apart from if the glue was to melt, if it got in a hot place and it sticks together the two fibre surfaces, that grip the paper. Put the carriage to the left-hand side, to release some of the tension on the main spring, which is like a big clock spring.

 If it's in regular use and it's just going away for a short while, I would say, have it ready to use, because you never know when you're wanting to actually grab a machine, make quick notes, or having a piece of paper in there and having it all ready and set to actually write. It won't make that great of a difference to its operation whatsoever. That piece of paper that is in there also covers the hole in the top which will stop various things falling inside. We've found all sorts inside, from bits of broken drink glasses, wine glasses, things that children have pushed inside. I've found pound coins, house keys, pens, a whole range of things in there. So, just generally keep it out of the sun. It doesn't like intense sun, especially on the rubber roller and the little O-rings. A nice cool place is ideal, as free from dust as we can. Try to keep it out of the rain, just with a light cloth over it and that should keep it quite nice.

 What if keys are stuck in the down position or the embossing head doesn't move? If my new line doesn't work, if my backspace doesn't work? Occasionally when I've serviced a machine, it's gone back, it's been bounced around in the back of the postman's van and keys or the embossing head can actually jump and slide around and it might have just jammed in a position so that it won't move. Firm but gently pushing of the embossing head towards the start of the line can actually quite often free it. If the new line or backspace aren't working, that's probably more of a service issue. We might find that keys might be down but loose and wobbly, and that would be a broken spring, that actually fastens the back of the key, or the dot, to the actual main chassis of the machine. So, if it's floppy and wobbling around, the chances are it's a broken spring and needs replacing.

 I don't think there's too much more on that. It's just, if it is jammed and because it's fallen off the sofa, pushed off the coffee table and it might just jam the keys and gentle persuasion could free it off. If it's fallen off a table, or downstairs, it could be a bit more crucial.

 My assistant here has told me that I haven't said about paper coming out the front of the machine. So, that means rewinding to when we're actually loading the machine with paper. If we've got our paper clamp, paper drum, in the correct position, and the rollers don't turn, we lift the levers up to release the paper clamp, push the paper in, put the levers back down and start rolling the paper. If the paper's coming out the front, there's two main things that could be. One of them is the paper will roll in but not actually roll round the drum, so the paper actually comes straight out of the front. If this is the case, again, it's a service issue because there's a number of springs and gears that actually cause that to happen. But before sending it off for a service, I would actually check that you had got the rollers in the correct position, because if you've got the paper drum halfway rolled round and you put the paper in, yes, it will roll the paper in, but it won't have clamped again, so, again, it will just push it out the front and you'll end up with a whole mismatch of screwed up, crumpled up paper, all jammed in, in the back of your machine.

 There's an issue of putting the paper in and when you let go of the rollers, the paper will actually shoot straight back out. These machines are made with not a lot of adjustment on them. So, the same problem, if paper shoots back out of the machine once you've rolled it in, you might also have problems rolling paper in, because, behind the paper roller knobs on one side, and usually the right-hand side, there's a little spring, that us visually impaired people walking along and we might bang our Perkins into the wall, the door frame or something, that is just pushing the paper roller knob down onto the spring, that actually tensions it all. So, it makes it very difficult to roll in, but on the adverse, if we release that too much, and it's a very fine line for somebody who's a child, trying to adjust the paper, or somebody who's got arthritis and can't grip it too tight for rolling the paper in. Not enough tension on that spring will then let the paper spit back out. If you've got that problem happening and there's nothing else wrong with the machine, I would suggest you roll the paper in, keep hold of the roller with your right hand to stop it spitting it back out, but pressing the new line key. That will actually engage all the gearing, stopping it from spitting it out, and playing fun and games of rolling it in and seeing how much paper comes back out of the back.

 Common problems:

 The embossing head is very slow and sluggish moving across the page, so basically you're typing faster than the machine is moving along. That's a service, a clean that needs to take place on that.

 We mentioned the backspace not working so well. That's the most common problem, backspace or occasionally the new line key.

 We do get intermittent other faults, such as shadow dots. Shadow dots are something where a dot that shouldn't be there is appearing. Probably most noticeable when you do a space and you might have a little dot that shouldn't be there. Occasionally, it's the other way round, that you're pressing a combination of dots, but one dot is regularly missing from what you're writing. That could be because one of the stylus pins has broken, or there's an adjustment under the front cover to actually adjust how far the pins rotate, or how far the cams that push the pins rotate, giving us how deep or how good the production of the braille cell is.

 The other issue is the bell gets hooked up and bent. There's a little arm on the back of the embossing head, that flips up and down, and it sometimes get jammed in the bell, so you can't actually move the embossing head away from the right-hand margin. It also gets jammed up when children decide to post pens and things in there.

 Servicing:

 I service Perkins braillers. You can service your own. There are videos on YouTube and things on doing a basic service. It doesn't tell you some of the little tricks and tips of reassembling the casing and when we talk about the casing, we take the bottom off first, the top, the back, the front apron, which is the bit that sits under the keys, and the key cover. They're the only bits of casing which we would remove. We want to clean those down. You'll find some old gunky grease and gluey type oil that's all filled with paper dust and dog fluff and cat fluff, probably. We clean those down and we apply some clean oil and it's a light oil. It's like sewing machine oil. It is actually clock and watch oil, but sewing machine oil is good enough. Please do not use WD-40. Lots of people say, "Oh, give it a squirt of WD-40." WD-40 is quite a thick oil, with acetone to thin it down. When the acetone evaporates, we get this horrible thick gunge, which then attracts more and more dust and causes the machine to clog up more and more. So, WD-40 is okay as a cleaning agent, so if you have got lots of old grease and gunge, best squirt it with WD-40, wipe off all that you can with a cloth, but when we're applying fresh oil, it should be a light sewing machine type oil.

 Servicing personally myself, a service would cost £30. Repairs do cost more, depending what parts are needed, but most the machines are done with a service. I would hope to have a machine that's come for service, on its way back to you within a week. Occasionally it's longer. We might have to wait for some parts to come from America, because all the Perkins parts come from there and there is shipping delays and stuff. But if it's a service and just general maintenance, I would hope a week.

 My final bits before opening up to questions are different types of Perkins brailler. We have the conventional Perkins brailler, a manual brailler, which I've been demonstrating. Questions in the chat have been about, "I've got an electric Perkins." Yes, these are power-assisted Perkins. There aren't many around, especially in the UK. I do have one. It does make things easier, it requires less amount of pressure. Having said that, there are extension keys to release some of the pressure. If you've got problems with arthritis and strain injuries, you don't have to put as much pressure on.

 For people who've only got good use of one hand, there is a one-handed Perkins brailler. So, when we're writing something, for example, like the letter G, we would press dots 1 and 2, and then release, but the keys will stop down, and then we can press dots 4 and 5. Pressing dots 4 and 5 will release the mechanism that's holding dots 1 and 2, so all the keys come back up. If you've accidentally pressed a dot that you don't want on the 1, 2, 3 numbered dots side, there is a little lever that slides to release those before the braille is actually produced.

 The Classic Perkins is what we've been talking about. There are two others, which is the Next Generation and the Smart brailler. As a service engineer, they are not nice machines to work on. A lot of the casing is plastic and if it's been in the sun, the plastic deteriorates it, so when we come to take the screws out of them, their mountings break and shatter. Nice and convenient and light, but when somebody says, "I've got a plastic machine for you to repair," I think, "Oh, no," because if these little pillars or lugs break on them, and we have to remove the casing on the back panel or the top, the back panel is nearly £100 plus shipping plus import duties, so it does make a repair quite expensive on one of the plastic machines.

 I suppose from that point, I can tell that there's been lots of questions in the chat, so if we can go back to Ben, he can direct some of those questions.

Ben Mustill-Rose: Many thanks to Alan there for an incredibly useful Masterclass. I know I've learned a lot already, particularly about servicing.

 Now it's time for questions and we've already got some questions lined up actually.

 We're going to come to Derry in a moment, but a question from the chat from Emma. How often would you recommend a Perkins brailler be serviced?

Alan Thorpe: Very difficult, as it is going to depend on how much it is used and in what sort of environment it is being used. But you'll know. When it starts to work a bit slow and sluggish, you'll know that your machine needs servicing. If you talk to Perkins, they would say that it's like your car and they will need a service once a year. But it could be three, four, five years. I've had machines that have never been serviced since they were bought and are still sort of working, but a bit sluggish, and that can be 20, 30 years later. So, you'll know when your machine doesn't feel like it used to.

Ben Mustill-Rose: We're going to come to Derry first and then Anna.

Derry Lawlor: My Perkins definitely needs a service. It starts to slow down, just the paper lock button. Where do I get it serviced, bearing in mind I'm from Ireland? The second question is how do I pack it up, so it doesn't get damaged on the way to you.

Alan Thorpe: Last question first, packing it. What I suggest to people, the vulnerable parts on the machine are the actual paper roller knobs, so get a strip of bubble wrap, packing paper, wrap it round your hand to make something like a doughnut and then put that over the roller knobs to protect those in case the box is dropped on its end while it's in transportation. Do not, please, put shredded paper in your machine. It's fine, I can get it out here, but most of the time I have to use the same packing to send it back and we've ended up with shredded paper all over the floor in here. If you've got no other option, put that shredded paper in a plastic bag to create padding. A box that is approximately 2" wider, 5cm wider, on each side than the machine is ideal. Boxes arrive here, where the sides of the Perkins are actually pushing the sides of the back out. That's not good, again, if they get bashed, dropped, fall over in the post van, the paper rollers get smashed.

 It depends where you are in the world, for getting Perkins to me. In the UK, you can send them to me via the Articles For The Blind Freepost and I'm happy to give my details out.

Ben Mustill-Rose: We’ll give some contact details towards the end.

Alan Thorpe: If you ring the RNIB, the chances are that they will actually point you in my direction. Email the guys at Braillists and they'll point you in my direction.

Ben Mustill-Rose: We're going to come to Anna and then Jeanette.

Anna Louise Smith: My question was almost identical to Derry's. I have a machine that I sort of was given about four and a half years ago. It's a very old machine. The backspace doesn't work at all. I was going to ask almost the same question really. How do I get it to Alan for a very good, overdue service? The only thing is, Alan, can you just go over those packing instructions? My machine does come in its own special case, so it can't move.

Alan Thorpe: Is this a wooden case?

Anna Louise Smith: Yes.

Alan Thorpe: They have been sent to me, but a Perkins in its wooden case is too heavy for the Freepost service. So, it depends on how your post office works. I know mine doesn't allow me to actually take them in, because they want to put them on the scales and weigh the packages and then it says it's not eligible for the Articles For The Blind Freepost service. So, put it in a good strong cardboard box, making sure that paper roller knobs are well padded. If you get in touch with me privately, we can send you documents with tips for packing.

Ben Mustill-Rose: We're going to come to Jeanette and then James.

Jeanette Fowler: When I was learning to use the Perkins brailler, I was always told that when I'm not using it, to put the carriage at the far right-hand side, because there wasn't as much tension on the spring. Is that the case?

Alan Thorpe: Personally I don't think it matters vastly. If you were putting it into storage for years on end, yes, but if you're using it weekly, so to speak, it's not going to make a great deal of difference. If you talk to somebody who repairs clocks, they do like an amount of tension still on a clock spring, to actually keep it active. So, short-term or occasional usage, it's not a problem. Long-term storage, yes, put it to the right-hand end, taking as much tension off as you can.

Ben Mustill-Rose: We're going to come to James and then Joseph. We'll try to take some questions from the chat as well.

James Bowden: I'm actually coming back on Jeanette's question there, because in your main talk, you did actually say put the carriage to the left, so it is to the right to remove the tension on the spring for long-term storage.

 My other comment that I was going to say is that the other problem I've seen several times is lines running together and that's because the clamps aren't actually working properly and that's another service issue, isn't it, Alan?

Alan Thorpe: It is, and it's very rare that I've actually seen that, where the paper is actually sliding around because the clamp springs are so strained, it's not clamping the paper. Very rare. You must be getting the same machine back a few times.

 Thank you for correcting me.

Ben Mustill-Rose: We're going to come to Joseph next and then Kawal.

Joseph Weisse: I just wanted to say, I live outside of Boston and went to Perkins. I've had a brailler since about 1955, when starting at Perkins. I just wanted to make a comment, if I might, on the history of the Perkins brailler, from the standpoint that Dr. Farrell, who was the director of Perkins in 1931, he was approached by a gentleman who was working on a construction crew on one of the streets near Perkins and applied for a job in maintenance and found that his talents enabled him to work on the development of the brailler from 1931 to 41. He was ready to release it at that time, but, of course, World War II came along and it really took, with production and other facilities, complications after World War II, till 1951 to release it. But he was really quite a master about this, very thorough, and it was just amazing how his version of the brailler got to be, from being on that construction crew working outside the gates of Perkins. Thank you.

Alan Thorpe: And thank you.

Ben Mustill-Rose: We're going to come to Kawal next and then Jackie.

Kawal Gucukoglu: In 1976, I got my first brailler and I used it week in, week out, and it lasted 12 years with no service, but let me finish. I then worked for a blind organisation and they used to have to transcribe things into braille and on occasions I used to have to use the Perkins. Let's say, after a week of use, the Perkins machines were not very good. So, why would a brailler made from the early 70s have more life than a Perkins that was made five years ago?

Alan Thorpe: I have to be careful on how I answer this one. If somebody says to me, "I've got a Perkins for servicing," and they say it's an old one and I'll say, "The older, the better." I think materials, the mouldings, the castings were all new, so things were very nice and snug. The materials seemed to be superior to mixed metals that are used now, whether it's because it's recycled metals, but metals seem to be softer. Some of the mouldings might have expanded with use and things. So, yes, if somebody brought machine and told me this one's 50 years old, I'll say, "I'll be able to do that no problem." If somebody brings me one which is five years old, it would be harder to work on, they're sloppier machines. It's just the way of life, isn't it?

Ben Mustill-Rose: We're going to come to Jackie now and then Mike.

Jackie Elshaw: Do you supply the covers for the braillers? I know you said you could use a tea towel or something. Also do you sell reconditioned braillers?

Alan Thorpe: I do have a number of dust covers, generally from ones where I've acquired them mainly. I don't actually have new ones to sell, because I'm not very often asked. If a request was put in for one, we could get one from Perkins. I don't recall exactly how much they are, but about £8 or £10 each.

 On the second question, yes, I do sell second owner Perkins, dependent on how many stresses in their life and things, but I'd like to work on a figure of around £150 for a second-hand machine.

Ben Mustill-Rose: We're going to come to Mike now and then Chris.

Mike Townsend: My Perkins is 1962 and unfortunately the roller, the plastic rubber roller has perished and split. It's now 60 years old. Do you think it's about dead or is it worth a go?

Alan Thorpe: It's worth a go. Are you talking about the main big roller, which is probably three quarters of an inch thick?

Mike Townsend: It's the big roller, that’s covered in rubber.

Alan Thorpe: I would hazard a guess that would probably cost about £90 to have repaired. The work on stripping them down, it's a full afternoon to do that, and taking a roller out of a donor machine, we could probably do that for about £90 and well worth it, I think, in having an old machine working.

Ben Mustill-Rose: We're going to come to Chris next and then Claire.

Chris Brady: A lot of the older Perkins, the cases were coated with vitreous enamel which protected them and I also remember, they used to have a machine, I don't know whether you've come across them, the Lavender machines, which were around in the 60s. Very, very much like a Perkins, a little bit more compact, but made of plastic. They weren't as robust as the Perkins but they were not bad machines. I teach braille and I find that, if I can get people using a Perkins, if they then go on to things like Orbit Readers and using the note taker functions on there, because they've used a Perkins, they can get very, very easily into the note taker facilities on the Orbit Readers.

Alan Thorpe: Thank you. The Lavender brailler, I would love one of those. I've got quite a museum collection of old braille machines. In fact I've been working on them today, all sorts of different types and styles, and one thing I've been looking to get hold of is a Lavender brailler to add to the collection. So, if anybody does know where there's one going, get in touch.

Ben Mustill-Rose: The Holy Grail. We're going to come to Claire next and then Christina.

Claire Morgan: I'm new to braillers. You mentioned a knurled knob on the back left of the machine. What's that for, and what do you do with it?

Alan Thorpe: That little knurled knob, when you release it, it will only move a centimetre, half an inch, or so. That is to actually determine how far to the left your paper will go into the machine, in case you're having problems if you're using punched hole paper. If you're not using punched paper, there's no need to worry about it. You might want to adjust that slightly, if you're using paper to put in a ring binder, so that the paper detector doesn't fall into one of the punched holes and stop you rolling the paper all the way in.

Ben Mustill-Rose: We're going to come to Christina next and then Jeff.

Christina Palmer: My question is about the spacebar. Mine is sticking. Do I have to send it in for repair? When I move the carriage back and forth, it will unstick.

Alan Thorpe: I would possibly say, yes, because it's probably not just the spacebar. The actual dots are all linked to the spacebar, so if we actually press dot 1, it also presses the spacebar and the same with dot 2, 3 and all the way through. So, they're all linked, so it might not actually be the spacebar that's causing the problem. It can be an excess of oil and gunge, so having it serviced would be a good move.

Ben Mustill-Rose: We're going to come to Jeff and then Tina.

Jeff Bashton: I'd like to make a couple of quick points. One is to claim some British pedigree for the Perkins brailler because David Abraham, who worked outside Watertown, Massachusetts, was British and came from Finchley. Secondly, Alan, the lady who commented that she couldn't get the brailler out of the case, of course, those who are familiar with those will know that they're quite big rubber rollers in front of the Perkins brailler, so if they're slid both far left and far right, the Perkins can be tilted backwards and taken out. So, it can be removed from that wooden case. Thirdly, to endorse Alan's work, he's serviced two machines and done an excellent job, so thanks.

Alan Thorpe: Thanks, Jeff.

Ben Mustill-Rose: We're going to come to Tina and then we'll probably wrap this session up with a comment from Terry-Ann.

Tina Arbery: When you're not actually using your brailler, what position do you store it in? Do you store in the position that it's meant to be on the desk in its case? Can you put it on its back or its side?

Alan Thorpe: It is best to keep it in the position it's supposed to be, with its rubber feet actually on the table or worktop, because if it's on its back, there are chances of scratching the table on which it's placed. Mechanically, it doesn't make a great deal of difference, because if you're carrying it in its case, it's sort of laid on its back.

 A thought has just come to me, if you have got old scraps of paper and things which have actually fallen into the bottom, tipping on its back can actually dislodge those and make them actually interfere.

Ben Mustill-Rose: We're going to come to Terry-Ann. I know we said we'd wrap up after Terry-Ann, but really quickly, we're going to come to Jennifer.

Terry-Ann Saurmann: I have one of the actual shipping boxes with the Styrofoam that the Perkins fits into and keeps it all nice and snug when packed. I don't know how easy those are to come by, but I just wanted to make people aware of the fact that there is such a thing. Secondly, both of my Perkins are from 1960 something, early 60s, for sure, and one of them has the roller with the rubber O-rings on it and the other one has the metal little rings that go all the way across, which are the ones that I prefer, but are they replacing those slowly but surely with the newer rings?

Alan Thorpe: Yes. It's now the one which has 11 rubber rings on it, which are now predominantly in use.

Ben Mustill-Rose: Lastly, we have Jennifer.

Jennifer Carpenter: I'd just like to say this has been really informative. I have just done the Braille For Beginners. I've been in touch with Alan, because he's very kindly refurbished my braille machine, so I'm looking forward to starting the Fingerprint course and using my brailler. So, Alan, thank you very much indeed.

Alan Thorpe: No problem. It's a pleasure doing them.

Ben Mustill-Rose: They'll think we planned that one now. On that note, some great questions, but unfortunately it's now time to hand over to Dave to give out some contact information and wrap up the session.

Dave Williams: Absolutely. I know that there are lots and lots of questions and, of course, with a popular product like the Perkins brailler that has been with us for 70 years and I dare say will probably be with us for another 70, there are going to be a ton of questions.

 So, Alan, are you very happy to share your contact details, if anybody would like to follow up with you directly?

Alan Thorpe: I certainly am, yes. The email is alan@eyecan.org.uk. The website is the same, www.eyecan.org.uk. The telephone number is 07961 406739.

Dave Williams: Thank you so much. Really appreciate your time and your expertise and fascinating to hear from Jeff Bashton about David Abraham's connection with Finchley. I always thought it was Liverpool.

 I've been Dave Williams. Thanks again to Alan and Ben Mustill-Rose for your help with a very busy evening tonight and take care, stay safe, and we'll speak soon. Bye for now.

Matthew Horspool: We hope you've enjoyed this episode of Braillecast Extra. You can find more braille-related content by subscribing to Braillecast in your podcast client of choice, or listening to Braillecast: Connecting The Dots For Braillists Everywhere, on your smart speaker.

 For the latest information about future Braillists events and how to join live, subscribe to our weekly email newsletter at braillists.org/newsletter/signup.

 You can also visit our Events page at braillists.org/events.

 If you have comments on this recording or suggestions of topics or guests for future events, we'd love to hear from you. Please email help@braillists.org. You can also find the Braillists on Twitter, @braillists, or on Facebook, facebook.com/braillistsfoundation.

 Finally, if you like what you've heard, spread the word. We welcome new listeners and live participants alike. So if you know other people who are interested in braille, please tell them where to find us.

 In the meantime, on behalf of everyone at the Braillists, thanks for listening and bye for now.

 The costs of producing this episode were defrayed by a grant from the Activate fund of the Winston Churchill Memorial Trust. For more information, visit wcmt.org.uk.