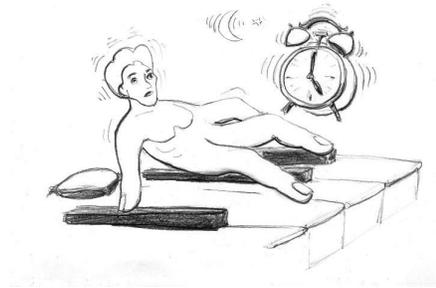


Group II – Handy Harry Meets Some Friends

Introducing Louis Lumbrical, Freddie Flexor, Tom Thumb and Rex Wrist

NB: Each exercise is written for the right hand, but of course they must all be done with the left hand as well, either immediately after the right or at some later point in time.

Handy Harry is a really little kid. His mom has just brought him home, and still all he can do is lie around – he hasn't even learned to roll over yet!



Lesson II-1 – Handy Harry Lying Down

- Flop your right hand on the keys, so that your palm mashes the white keys down and your 2nd finger rests in between B flat and C sharp, your 3rd between C sharp and E flat, and your 4th and 5th between E flat and F sharp **[illustration #1]**. Let your arm hang heavy – like a suspension bridge between your hand and your shoulder. All the underside of your hand – your palm, and the underside of each part of each finger – should press really snugly into the keys, so as much skin and flesh as possible feels rooted in the keyboard.
- Can you still feel your two sitz bones that press into the chair? Where is there more pressure, on your hand or on your sitz bones? Can you still feel your feet? How do the 5 points of contact compare – your hand, your sitz bones and your feet?
- Uh oh, the wind's starting to blow! Can you sense the wind nudging your body to sway gently, forward and back? Can you feel how the pressure at each of those points of contact changes as you rock gently in the wind?
- How do these points of contact change if the wind blows you sideways, making you sway gently left and right?
- Now move your body again in circles, keeping your hand mashed on the keyboard. Let your suspension bridge stay heavy – it simply hangs between your hand and your shoulder. How do all the points of contact change and relate to each other as the wind blows you in circles?
- Now do all these variations but with only your left hand flopped heavily, comfortably, completely into the keys. Mash your left hand totally into the white keys and explore all these variations in movement.
- Finally do the whole series of movements one last time, with both your hands 'married' to the

keys.

Lesson II-2 – Handy Harry Rolls Over For the First Time

- Flop your right hand onto the keyboard again, but this time, don't even be so particular about what notes get pressed down. It doesn't matter much anyway, because now you're going to roll your hand very slowly over onto its back. When my daughter Masha was an infant, the first time she rolled over it was entirely by accident: she was looking up at something on the ceiling, then looking a little further... and a little further... until *plop* what a surprise! Over she went!

Try to make your hand do it like that now: feel it very heavy, and slowly lift your thumb from the keys while your fifth finger and the whole outside of your hand still lie heavy, as if your thumb wants to look at something over *there*, and a little further... and a little further... until unexpectedly *plop*, your hand flops onto its back! Try to do this so slowly it's really like the very first time Handy Harry rolls over. The heavier you keep your hand, the more interesting this feels.

If you do this while staying really relaxed through your entire body, you should feel your arm swing ever so slightly, and this in turn pulls your body a bit to the right. Stay so loose that *you* don't move your body; instead sense the weight of your arm, like an external force, pulling it so it slightly shifts.

- **[illustration #2]**
- Now your hand is lying on its back. So, ever... so... slowly... lift your thumb in this enquiring, inquisitive way, slowly, a little bit at a time... until finally your right hand flops back on to its palm. Then *keep on* rolling to the left: you now begin to lift the outside of your hand, the root of your 5th finger, from the keys, slowly, little by little, until your 5th is up in the air and your hand is lying on its inside edge, on the space between your thumb and 2nd finger. It's as if Handy Harry now tries to look *under* himself and gets all twisted up in the process **[illustration #3]**. Again, can you stay so relaxed that you can feel the loosening effects of this 'hand rolling' elsewhere in your body?
- Finally roll back on to your palm and rest. How does your arm feel now? Is it any heavier? Has its position, the way it stays at rest, changed in any way?
- Repeat this a number of times, always exploring how it *feels* and how the *sensory picture* of your hand, arm and body changes and evolves as a result.
- Do all this with your left hand...
- How does it feel to roll *both* hands slowly, lazily, exploring the movement as if for the first time?

Lesson II-3 – Handy Harry Slipping and Sliding

- Place your right hand way over to the left on the keyboard – as far down as you can reach comfortably. Let your palm and fingers mash the keys down – but your fingers are facing left, not towards the backboard.
- Begin to pull your hand along the keyboard to the right, sliding your palm and fingers so slowly they don't even make the notes sound as each key in succession gets mashed down. **[illustration #4]** And while the heel of your hand is mashing keys down, your fingertips are letting keys up one by one. If you go slowly and quietly enough, the only sound you'll hear is the noise of the piano action as each key in succession pops up because your fingers are no longer holding it down.
- Don't slide so far up the keyboard that you become uncomfortable. Pick your hand up and again gently flop it near the bottom of the keyboard and pull, drag your hand gently so it slides to the right, letting the keys pop up one by one.
- When you slide quite far up the keyboard, instead of lifting your hand and replacing it lower on the keys, leave it where it is and very slightly lift your fingertips. Handy Harry lying on his belly lifts his head to look towards the bass notes. **[illustration #5]** He needs to lift his head like this because now he's going to slide forwards instead of backwards – can you do a slow glissando to the left on the keys, in the direction your fingers are pointing?
- Place your hand on your thigh near your knee gently lift it until the back of your hand touches the body of the piano underneath the keyboard – the panel below the keyslip. Slide the back of your hand slowly up and over the keyslip and the outside edge of the key and let it flop onto its belly on the keys. **[illustration #6]** Repeat many times. Try to stimulate not only the back of your hand, but the backs of your fingers as well. How many little areas of the back of your fingers and hand can you discover anew by sliding them, rubbing them, massaging them on the piano?
- Place your hand on the lower part of the keyboard as before, but this time as you slowly drag your hand to the right, flop it over onto its back and keep dragging, keep sliding – and flop over onto your stomach... and your back... and your stomach... and your back... as you keep sliding... **[illustration #7]**

This sliding exercises awakens the muscles of the hand without giving them anything to *do*. This gentle stimulation is different from massage because your arm is actively joining your hand to the keys – a good and desirable action which resembles what the arm does when you play – and it stimulates the bones as well as the skin and muscles. Your hand becomes more alive because it senses all the parts of itself more vividly.

Lesson II-4 – Handy Harry as Swamp Monster: Hello Louis¹ Lumbrical!

- With your right hand in midair, palm upward, make your fingers wave goodbye to you. Many people curl their fingers so the tips go in and touch their hand, but here don't curl them at all: just move all four fingers together as a unit towards you, keeping them pretty flat. Your flat fingers fold in sort of towards the heel of your hand. It is *very important that they don't curl!* Learn this movement well, and be sure you can tell the difference between your fingers folding up tightly by curling (which maybe you are more used to) and your fingers waving goodbye by just slightly *curving* as they do here. **[illustration #8]**
- Turn your hand palm down in the air and make the same flat finger waving motion in this position. Are you still sure they are not curling, or hardly at all?
- Now place the exact middle of your palm, precisely half way between your wrist and your top knuckle, on a table edge. Mash the exact middle of your palm into the table edge. The middle of your thumb's middle joint also rests on the table edge **[illustration #9 of Handy Harry lying on his stomach, looking shyly up, his body half folded]**. Your fingers rest on the table, totally relaxed and even heavy.
- Staying in this position, try the 'waving' motion you practiced, keeping your fingers pretty straight and bending them from the top knuckle. **[illustration #9A, B]** First do it lightly, starting with your fingertips in the air. As you wave goodbye, your fingertips tap the table. Try this with various speeds: lightly and quickly, then a little more slowly and lazily, resting on the table top a bit every time you wave – don't bounce right back up into the air but stay a little...
- Do the slow 'waving' motion again, but this time, begin with your fingertips already on the table top. This makes your fingers begin to squeeze the table a little bit, which in turn makes your top knuckles rise.
- Place your entire hand on the table instead of hanging off the edge, and even let some of your forearm rest on the table. Observe your hand extremely closely. It looks like it's just lying there and it's just a hand, but are you sure? What happens if you don't *do* the waving motion at all, but you just *think* about doing it? Can you detect some slight, almost non-existent movement in your hand? What could be in there? **[illustration #10]**
- Now think about the waving motion and perhaps let it even begin to happen, but only a millimeter... Do you know how small a millimeter is? Could you do the waving motion so imperceptibly that your knuckles show just an ever-so-slight sign of life, as if there was some sort of swamp monster in there who's been asleep for seven thousand years but now, because of global warming, he is coming out of his extended hibernation and just beginning to move again? **[illustration #10A]** But he literally only moves a millimeter, that means that your top knuckles rise, but so little that if you blink you would have missed it altogether.
- Now feel the inside of your hand come just a bit more to life so the swamp monster rises *two* millimeters.... And let him rest again.... And then *three* millimeters.... And rest... and so on: each time that monster shows a little more signs of life, let him rest even more profoundly.

¹ We can substitute female equivalents for all our cast of characters – I'm a guy so I naturally name the parts of my hand and arm after guys as well. But for you girls, how about *Linda Lumbrical* for starters? Or *Lydia Lumbrical*? *Louise Lumbrical*?

Every time he tries to get up above the ooze of the swamp he ends up just sinking down more deeply into it.... But still, gradually, over many, many repetitions, more and more of the monster comes up out of the swamp.... **[illustration #10B]** Your fingertips never curl, but they begin to slide towards the heel of your hand... your thumb slides more and more under the hand as well...

- Don't ever let the monster stand right up – if he ever got loose from that oozy swamp, who knows what havoc he might wreak? No, let your top knuckles rise up a little more, but always leave the edges of your hand lying on the table. All along your fifth finger, and all along your thumb, remain in touch with the table, and only the middle of the underside of your hand rises up...
- Drape your left hand over your right hand and continue to feel that swamp monster coming to life. Now he rises up against the natural resistance the weight of your left hand offers. Maybe your left hand does the monster movement a bit too, as if there are two monsters there, one on top of the other, both trying to wake up and rise up out of the ooze....
- With your left hand on top of your right, begin to slide around on the table... and then while continuing to slide, start doing the monster-growing movement, a little more quickly now... like repeated quick inhalation-exhalations of the monster's lungs... **[extra illustration?]**
- Take your left hand away and just lie there – try the monster-growing movement again – does it feel different now? Does the inside of your hand feel more alive, more powerful in the way it can grow that monster shape?

Lesson II-5 – Handy Harry Sticks his Bottom in the Air

The first part of this lesson is the same as the previous one – but after a few steps it will go in a different direction...

- Just as before, place the exact middle of your palm, precisely half way between your wrist and your top knuckle, on a table edge. Mash the exact middle of your palm into the table edge. The middle of your thumb's middle joint also rests on the table edge. Your fingers rest on the table, totally relaxed and even heavy.
- As before, staying in this position, try the 'waving' motion you practiced, keeping your fingers pretty straight and bending them from the top knuckle. First do it lightly, starting with your fingertips in the air. As you wave goodbye, your fingertips tap the table. Try this with various speeds: lightly and quickly, then a little more slowly and lazily, resting on the table top a bit every time you wave – don't bounce right back up into the air but stay a little...
- As before the slow 'waving' motion again, now beginning with your fingertips already on the table top. This makes your fingers begin to squeeze the table a little bit, which in turn makes your top knuckles rise.
- And now something new: again keep your fingers flat, but when you do that waving motion to squeeze the table, let your fingertips slide towards you on the table – the heel of your hand, which is already hanging off the table, descends even lower. Finally your hand is almost vertical to the table while your fingers remain flat on it. Your hand and your flat fingers form an angle of 90 degrees. **[illustration #12]**
- Stay in that low position and pull your fingers even a little bit more, many times, to really feel that special motion: it's a grasping motion *without the curling element*. Here we inhibit all finger-curling on purpose. The table offers a *constraint* that blocks the curling and isolates the pure work of **Louis Lumbrical**, the muscle that bends the finger as a whole and manifests the hand's arch **[illustration showing Louis' exact location]**. To stick his bottom up in the air, Handy Harry must be able to bend his body into a right angle at his waist. Now he's found a way to practice this move while lying down: he can't actually stick his bottom up in the air yet, but he can 'go through the motions' in this position as a preparation.
- Put your hand on the table again, but this time, don't let your heel hang off the table edge. Instead, lay your whole hand palm down on the table top. Do Louis Lumbrical's waving motion again, gluing the heel of your hand to the table so it can't move. What happens? Your fingertips slide towards your heel, and up goes Handy Harry's bottom! **[illustration #13]** This is an even more intense way to isolate the important work of Louis Lumbrical.

Note: this last movement resembles the "monster" movement from the previous lesson, and raises the question: could there really be a monster hidden inside Handy Harry or is he just a normal child? Perhaps we can never know...

Lesson II-6 – Handy Harry Folds Himself Up To Do a Somersault: Hello Freddie Flexor!

This lesson bends the fingers in a completely different way. The previous movement and this new one are both flexion, but this one looks completely different, and uses a different set of muscles. To make it as clear as possible, first the fingers will experience this movement without using any muscles at all!

- Flop your right hand on the table with all of it, fingers, heel and even all your forearm resting on the surface. Make it as relaxed as possible. This is your starting position.
- Slide your arm and hand forward (away from you) just a tiny bit, but pretend there are little bits of glue on your fingertips that prevent them from sliding. Your fingers stick where they are so your sliding hand makes them curl a little. Slide forward and back, watching your fingers curl a bit and uncurl. It feels a bit bizarre, because they curl and uncurl *without making any effort*: normally **Freddie Flexor** would do the curling but now he's taking a break – it's as if someone else altogether curls your fingers for you! **[Illustration #14, 14A: here Handy Harry's head is at the tip of the fingers instead of the other way around. This way he can fold up easier to do his somersault in subsequent illustrations]** Stop for a moment when you've slid forward, and sense where you can feel some relaxation in this unusual position... and then slide back to the starting position...
- Slide further forward, far enough that the tips of your fingernails stand up on the table. Relax each part of your hand and arm until this feels comfortable. And come back to the 'at rest' position. Repeat many times. **[illustration #15]**
- Now slide so far forward that all your fingernails 'lie on their backs' on the table, and stay there for awhile. **[illustration #15A - Handy Harry is now looking half underneath himself]** How does this make your fingers feel... your hand... the rest of your body? Can you sense some relaxation or some 'let-go' in your arm... your shoulder... your back? When Freddie Flexor takes a break, his relaxation can 'infect' other parts of you, making them relax as well... And slide back to the starting position...
- Go even a bit further so that your nail joint *knuckles* touch the table. Do you feel your body has to move forward a bit to help your fingers lie on the table in this strange way? Does that increase your sense of relaxation through all of yourself? **[illustration 15B: Handy Harry is now looking right back underneath himself up at his own belly, but still lying pretty flat]** And slide back to the starting position...
- Believe it or not, you can go even further: roll so far that your fingers' *middle* phalanges 'lie on their backs' on the table. Be sure that your wrist stays relaxed and lies heavy on the table as well. Handy Harry doesn't try to sit up or stand up: he just curls up. He hasn't the strength to pull himself erect yet so he just stays floppy and curled. **[illustration 16: now Handy Harry's bottom is part way up in the air]** And slide back to the starting position...
- Roll so far forward that you go past the back of your middle phalange and you are perched on the middle knuckles. At this point, your wrist and the heel of your hand *have* to leave the table, but not because you lifted them up with your muscles – it's just skeletal mechanics that makes them do that. The bones of your hand curl in upon themselves so far that your wrist can't help but leave the table, even though it's still completely relaxed. And slide back to the starting position...

- Finally roll so far forward that each finger in its entirety 'lies on its back.' All three phalanges and all three knuckles of all your fingers are now lying on the table... **[illustration 16A: Handy Harry has almost done a complete somersault – he's gone as far as she can go without tumbling right over. His legs are straight and only his tippy toes are still on the ground behind him]** And slide back to the starting position...
- Roll so far forward that each finger in its entirety 'lies on its back' again, but this time take more time to roll back the way you came. Roll back one step at a time, stopping at each resting point to feel how different parts of your arm and body relax and adjust to each new position. How many 'stopping points' can Handy Harry discover in his own somersault?
- Repeat this slowly, speculatively, many times. Finally let your two hands hang by your sides: sense how different they feel.

Lesson II-7 – Freddie Flexor Helps Handy Harry Crawl like a Centipede

- Flop your hand on the table, and slide your arm forward again to make your fingers curl as you did in the previous lesson, to the point where your middle phalanges are lying on their backs. Your wrist is still on the table and your fingers are comfortably, gently, effortlessly curled into your palm.

Active hand, passive fingers

- Instead of sliding your arm back where you started, simply uncurl your fingers.
- Now slide your arm forward some more, and again uncurl your fingers. Then slide forward some more. Keep crawling forward like this: go all the way across the table if you like – Handy Harry is playing at being a centipede!
- Now go the other way: your arm pulls your relaxed hand back towards you so your fingers flatten out, then your fingers curl so your hand can now slide even further back.

Active fingers, passive hand

- Now crawl forward again but using a completely different effort to make the move: this time make Freddie Flexor do the work! Curl your nail joints so they *pull* your hand forward – now your fingers are active and your hand stays passive. Here your fingers don't curl quite so far: they pull your hand until the nail joint is past the vertical, but not so far that your fingernails lie on the table top. When your hand has been pulled forward, uncurl your fingers so you can pull again, and crawl across the table like this.

From the outside it *looks* the same but the feeling *inside* your hand is completely different. The first time, your hand was floppy and effortless – the 'emptiness' of your muscles allowed you to feel the bones of your hand inside their muscle wrapping. Now, the inside of your hand feels fuller because the muscles are *working* in there...

- Can you crawl *backwards* with your fingers (Handy Harry's legs) providing the power? Now your fingers *uncurl* to push your hand back towards yourself, then they curl again, your fingertips sliding lightly towards you in preparation for another *uncurling* push.

Active fingers, active hand

- Finally, 'centipede crawl' forward and back without even thinking about where the effort is coming from. Let the two ways combine however they want, so it feels totally natural and uncomplicated.
- Review all three ways of 'centipede crawling' so the differences in sensation between them are totally clear.

Lesson II-8 – Louis & Freddie Help Handy Harry Sit Up!

For this one the table needs to be very low – you may want to stand up when you do it.

- Lay your hand flat on its back on the table **[illustration 17:]**. Just rest there for a moment. Let your arm relax. How well does your hand mash into the table when it is lying on its ‘bony back’ instead of its ‘fleshy front?’ If you’re really relaxed, your fingers won’t lie flat but will naturally curl gently upwards.
- Let Freddie Flexor curl your fingers a little bit more. He makes just the tips of your fingers beckon “Come here.” **[illustration 17A:]** Do this very softly – Handy Harry wants to sit up but he’s not quite strong enough to raise his entire body so he only raises his head. This helps you feel more clearly how Freddie Flexor works. First curl your fingers just a bit; then gradually increase the range little by little. **[illustration 17B,C:]** Curl and uncurl, a little more each time until your fingertips curl in gently to snuggle into your palm **[illustration 17D (photo does not exist yet):]**. *Keep it loose*, don’t invest a big effort – your fingertips barely touch your palm.
- Let Louis Lumbrical curve your fingers: still lying on your hand’s ‘back,’ wave ‘come here’ with your whole finger instead of just the tips. Now your fingertips don’t come anywhere near your hand **[illustration 18]**. Make sure it’s just Louis Lumbrical working now instead of Freddie Flexor.
- Alternate between these two ways of beckoning ‘come here:’ do four of one, then four of the other. Can you sense the different muscles you use to do these two different movements?

When Freddie makes an effort, Handy Harry only lifts his head **[see illustration 17]**; when Louis makes the effort, Handy Harry bends at the waist and does a sit-up **[see illustration 18]**! Finger curling activates the *flexor* muscles of the forearm, attached to the fingertips by tendons. Flat finger bending activates the *lumbricals* that are directly in the join between hand and finger.

- Go back and forth between these two distinct movements many times. Really be able to sense the difference between them and to make sure you are doing one and not the other.

By alternating between the two you will learn the difference between curling and a whole-finger flexion. Make sure you can do either one at will, without getting mixed up! Learn how each *feels!*

Lesson II-9 – Freddie and Louis Get Together: and Harry’s Bottom Rises Even Further!

The trouble with the previous lessons is that when we’re paying attention to Louis, Freddie feels left out, and when we’re paying attention to Freddie, Louis feels left out. They want to work together!

- Lay your hand on the table, but this time, don’t make it flat. If you lay your hand down totally relaxed, there will be a natural curve to your fingers which already leaves your top knuckles in the air [**illustration 19**].
- In this position, if Freddie Flexor works on his own, he will actually pull Louis down towards the table. Try pulling with your fingertips only and see how that effort pulls your top knuckle downwards [**illustration 19A**].
- If Louis alone makes an effort, Freddie get splayed out flat – your knuckle joint gets less curled and your fingertips start to point ‘the wrong way...’ (at least, some people call it the wrong way...) [**illustration 19B**]
- Begin to let Freddie Flexor make a flexing, curling effort, but as soon as Freddie’s effort kicks in, make sure Louis gets in on the action too – as a result, the more Freddie pulls, the more Louis rises *up* in the air instead of being pulled down [**illustration 19C**]. They figured out how to work together! And if you let the heel of your hand and your wrist come up off the table a little, Harry’s bottom now soars even more gloriously in the heavens than ever before!

Lesson II-10 – Handy Harry Bonks His Head – Hello Rex Wrist!

We end this section by letting go of all our concerns about Louis Lumbrical and Freddie Flexor, and reminding ourselves that no matter what Louis and Freddie may be doing, **Rex Wrist** can stay loose – he’s cool, man! **[illustration 20 of Rex Wrist with a cool hat, sunglasses??]**

- Knock on the table as if you were going, “knock knock, who’s there?” Here your loose fist is Handy Harry’s head **[illustration 21]** – when he bonks his head, is his ‘neck’ (your wrist) loose or tight? Of course it’s loose – we go ‘knock knock’ by waving our wrist, not by moving our whole forearm.
- Try the same ‘knock knock’ motion keeping your wrist solid. Notice how different this movement feels: now your arm and hand is more like a weight lifter and less like a gymnast. **[Illustration 21 A, Bof two Harry’s: one football player and one long distance runner...]**
- Go back to knocking with a loose wrist – ahhh, that’s better! Try knocking different things – what kind of different sounds does Handy Harry’s head make as it bonks... a wall? A door? Your own forehead? Your brother’s skull? Oh, no, better not try that one...
- How about bonking the keys? Knocking a key to make a robust, vital yet light staccato, you’ll quickly see how useful it is to keep your wrist nice and loose.
- Also try this with different degrees of looseness or tightness in the wrist. Notice that if you really bunch your fingers tightly, the effort interferes with an easy knocking. But this too is a valid technique – perhaps in some Prokofiev piece such an almost ugly sound might be exactly what the composer wanted.
- Try loosening the fingers so much they just barely keep their wrist shape, and knocking a piano key like that – how does this change the sound? **[illustration no photo yet]**
- Try even letting your fingers hang totally loose. They stay curled because that’s the way they lie when they are at rest, but they no longer make a fist at all. This creates yet another knocking sound. Each one of these timbres is an interesting and useful musical entity. **[illustration no photo yet]**

When a drummer taps the drum, the drumstick must bounce freely back up off the skin – otherwise the tone is damped. There’s a sort of ‘bounce’ in piano playing that has the same wonderful effect on the tone: the wrists must be extremely loose and responsive to achieve it. This Handy Harry bonking exercise helps us develop the same quality which is not just loose, but loose *and* responsive – capable!