

## Runesmith 147

### [Chapter 147 Golem.](#)

#### **Runic Cleansing has reached L4**

Roland looked at the cleansed golem core in his hand while grumbling. The item had been cleaned of any remains of the monster that it had belonged to. Normally this would be a moment to cheer but the number of shattered cores that ended up in the dumpster still made his head hurt.

Several weeks had passed ever since he received the basic books on golem creation from the cat Professor. They introduced him to some golem designs that he could use and explained the pros and cons of them.

As this was his very first iteration he would need to go for the most basic model. There were a few designs that he could go with but he chose a simple one.

The golem's base would be shaped like a rectangle. From the sides of it, he would insert four legs that would be used to give it motion. The first basic quadruped design was a good starting point as he wouldn't need to worry that much about the balance.

Getting a golem to have a human shape was not such an easy task. The biggest problem was the balance of parts. One badly fashioned part could make the whole creation be unable to move and stumble all over the place.

The human body went through hundreds of thousands of years of evolution. It was not easy to just recreate the joints in metallic form. Even then, if the program that the golem was running on was buggy the whole thing would just not work.

Thus for his first try, he decided to make something that didn't need as much attention to detail. Animals that run on four legs had less trouble with balancing themselves. He also had a good test subject to work with, his trusty ruby wolf, Agni.

While Roland did intend to try mimicking a wolf's walking pattern this first prototype would be more similar to a small spider. Instead of eight legs, it would have four now as a similar basic golem model was presented in one of the books he received.

It was quite astonishing how these golems worked. At first, he thought they would be similar to robots but they weren't quite as complex. At least not with their outer shell. While robots required complex joint design and a lot of movable parts to make them work it wasn't the same for golems.

For instance, a knee joint could require a separate motor to be mounted on the side. It could also use pressure pumps, springs, and all sorts of other solutions. With runes, on the other hand, magic was the driving factor.

The magic could generate all the push and pull forces that joints needed. This also didn't require separate small motors or valves of any kind. The golem just needed one power source on its body along with the golem core.

Thanks to this fact he didn't need to worry as much about the design. For his first spider-type golem he would use simple joints with some constrained movement.

The first iteration would have legs composed of three parts. They would start out by being connected to the main body and to the main joint. This joint would have limited back and forth movement that wouldn't allow it to bend downwards.

To it, he would attach the middle part of the leg which would have the reverse type of movement. This would allow it to somewhat be able to squat down to the ground. The last part would have the same movement joint as the previous one. This would be the foot portion that would actually be making contact with the ground.

With all four spider-like legs connected to the main body, the golem should be able to somewhat move itself around. By moving the joints that were connected to the main body part it should even be able to turn itself around.

The last important part of this golem would be the 'head'. This would be the part with all the golem's sensors that it required to see the world. This was a part that he had already worked on before and created his mapping device with.

Making his golem identify him as its master wouldn't be hard. Just as he thought it over before he would create additional items that would be recognized by his golems. Luckily in the books, this was all discussed and the craftsman could imprint their magical signature onto their creations.

This was similar to a fingerprint and was hard to copy by others. Hard but not impossible, there of course were ways to take over golems that didn't belong to the creator. This was not an easy task to perform while the golem was active and defending itself.

Thus the only real way of doing it was after it was disabled. An easy way to go around this would be when a person knew the creator's magical fingerprint or had access to the golem's key.

These magical automatons could be given to other people. The craftsman just needed to imprint them as the true master. Even then, the person fashioning this golem mostly put a backdoor in for themselves. No one wanted their own creations to be used against them, even less when they were giant war machines.

"Here Boss, the last one, just like you wanted it... but are you sure this is what you wanted?"

Bernir was to the side bringing in the golem's legs. With the help of his assistant, he could focus more on the runes than the basic skeleton for his new creation. With all of these parts here he would just need to 'weld' them together and then apply the runes.

With a good enough diagram and a splendid helper in Bernir it wasn't much of an effort to get the golem's body into place. The prototype wasn't that big with its chassis being about the size of a modern laptop.

The golem's main body had special attachments for the legs which were just screwed into place. With time these hastily produced joints would start to loosen up. When that time came any golem would need a varied amount of repairs. Only when using superior materials could a creation like this work for years and not fall apart.

When all the parts were put together the creation looked like some kind of four-legged creature with a silly square-shaped head. The main 'camera' in this golem was just a small square box with a brown matt gem.

This was not a mana stone, it was a crystallized mineral called the Levin crystal. It could be polished down to form a nice-looking orb and came in various shapes and sizes. It was one of many other various materials used for magic-related items.

A runesmith was able to inscribe light runic inscriptions in these types of crystals. The crystal was needed as a sort of lens that let light in. Through it, the golem would be able to see and distinguish between targets.

This was not the only way for his contraption to distinguish between targets but it was one that he was more familiar with. He could mimic his mapping device that he previously inscribed onto a ball of metal.

This type of sensor was more of an add-on but it could not replace a true one that allowed the golem to actually see. Without the eyes the golem would be only able to see the general area it was in and the spot its targets were in.

The amount of movement it would be able to react to would be also very limited. The map worked at a large delay that could only be brought down to one second per update. This made the feature good for a wide area scan but not for close-quarters combat.

Through working with the golem cores his fine mana skills had been upgraded as well so Roland didn't fear this crystal bursting in his face.

"Well then Boss, I'll leave you to it!"

Bernir helped out with the initial assembly but Roland would be doing all of the rest himself. The initial rune craft procedures were done by him on the separate parts while Bernir was working on them.

This was one of the first times that he had worked on so many separate parts. This project required a lot of planning and mapping out. All of the legs needed to be inscribed with runes before the assembly.

After all of the parts were brought together it would be quite difficult to proceed from there. He would not be able to heat up the whole golem to make it easier for himself out of fear of something getting broken. Using his hammer on the parts when they were all connected together was also out of the question.

He could attempt a hands-on approach by forcing the runes in through his hands. This would take some time but was possible if he managed to increase his limits further. Just as his level went up, so did his stats grow but with how harder runecrafting was on the better materials Roland expected to stick to his hammering for quite some time.

This meant that with this one he just needed to use the hard method of doing it by hand on just the spots that connected to the premade chassis. Ethereal pathways for the joints were a must as it was a requirement for any moving parts.

With this being Roland's first time he was meticulous. The spots where the joints were connected were touched in a gentle fashion and his mana flowed in at a slow pace. Sweat covered his forehead as he worked.

Compared to the previous years his skills had increased exponentially. Thanks to this it didn't take him that long to complete this part of the project and in only a few hours he had everything fused together.

The debugging skill was a godsend at moments like this. With only one glance he could tell if there were any mistakes made. Even though he saw a few red lines here and there it seemed that the whole process was a success. Now came the last phase of the plan, giving his creation a proper power source.

While he would be happy to just plug it into his runic generator this was not a possibility yet. Instead, he used this world's equivalent which was Elokin's crystals. The one that he managed to receive from his dungeon expedition would finally see its use.

This as everything else had already been pre-arranged. While the golem core was right in the middle of the rectangular body the small compartment for the Elokin's crystal was right below it.

After opening a little latch he just slid the crystal in. This power source was quite pure as it was able to retain a solid form. With time it would start to turn to liquid which after a while would be burned up and vanish.

The inside of this little square compartment was fitted out with special siphoning runes. The power source didn't need to be placed in any kind of socket as the runes would just suck the mana away by themselves.

As with all of his previous creations Roland didn't shy away from adding a couple of mana stones to lower the power consumption. Only after he had worked the kinks out of this prototype would he attempt making it from aether versions of deep steel.

Then maybe he could move up to more exotic metals that could produce a real powerful golem that could go toe to toe with high tier 2 monsters or even tier 3 ones. While the creations of Runesmiths were mostly slow, they did possess an uncanny defensive capability.

Even strong monsters would find it hard to do any damage to a golem's metallic body. Without a noticeable weak spot that was a golem core it was quite hard to take one out. This also made ones created by human or dwarven hands much better. The craftsmen could hide the core deep inside of the metallic body which would make it extremely difficult to battle such a metallic behemoth.

"Finally it's time..."

Roland swallowed his own saliva hard as he completed his checks. All the runes looked to be in order and the inside software had been implemented from the books. In theory, this would be enough to activate it.

Before going through with it he looked back onto his notes. After double and triple-checking everything he finally decided to go through with it.

The activation process was quite easy. There were a few ways a craftsman could go about it. One was by just activating it by giving the runic structure a jolt with their own mana. Such an activation would just

place the golem into a perpetual 'on' state. The only way of shutting it down would be by touching it again to turn it off.

This was fine when working with a prototype like this but would not work if he wanted to have it function for other people. Normally a craftsman would first create a remote item that they used as a medium so that they would not need to do everything by touch. This would also save them from having to run after the golem if it ever ran into some kind of system error.

Roland was in a somewhat rush with this one, so he decided to just go with the hands-on approach. His hand was placed on the golem's main body and it started to glow. The runic structures lit up in a bright blue light before settling down.

The golem was down on the ground and had some space to move in. For the first test, he decided to use a closed environment. If this thing went berserk and started causing chaos he could contain it easily here.

The gem that represented his creation's eye glowed for a moment before settling back into its brownish color. The light show soon stopped and Roland's facial expression went through a few stages before it settled down on a frown.

"Did it fail?"

But the moment he asked he heard a familiar sound which was followed by a popup screen.

**You have gained a new title: Runic Golem Architect**

**Runic Golem Architect**

**Title**

**A person with this title has managed to construct a runic golem of their own making. With the help of this title some of the secrets concerning golem creation are revealed.**

Roland grasped his forehead as he could feel a surge of information getting shoved in there. This was a bit similar to how he used to receive knowledge about how to cast certain spells when he was still training his mage class.

While the simple spells like mana bolt didn't give him much trouble this injection felt a lot worse. After it was done he could feel that he already knew a lot more about his new creation than he did a few seconds ago.

The title was quite grand as it had the 'Architect' part to it. Roland deduced that this might have been some higher title that he achieved due to his using the debugging skill on the golem designs from the books he was lent. It seemed that by altering a few things made him more of a designer and the golem's creator in one fell swoop.

While he was confused why the golem was not working at first, with the title giving him some aid he realized what the problem was. The golem was in working order but it needed outside input to make it function.

It was as if he managed to turn on the pc but he didn't go into the operating system just yet. Thus while stretching out his hand towards his creation he finally gave it a simple order.

"Golem... stand up!"

The little gem eye of this small automaton shone for a moment before the legs started rattling around. It looked a bit strange for a moment but soon the insect-like legs started moving around and the golem rose up slightly from the ground.

"Golem... move one step to the right..."

The small contraption creaked a little bit but it managed to slowly move its legs in such a way that they carried it to the side. Even though Roland was not responsible for the runic program running these calculations he was quite fascinated that his newest creation was working.

A smile appeared on his face as he clutched his fist in victory. The title was there and it was working, his preparations that took him months to plan finally bore fruit.

"Huh... wait what's that smell?"

His little victory pose was brought to a stop as he noticed that something was off. He looked at the small golem and noticed that a certain part was starting to glow orange.

"The hell?"

Bernir almost fell down from a chair as he heard a loud sound of something exploding. He looked to Agni for a moment before both of them sprinted to Roland's workshop.

"Boss, are you all right?"

"Bernir?... yeah I'm fine. When I try to use untested minerals as power sources from the dungeon next time... please kick me."

Roland was spotted on the ground with a lot of dirt on his face. The golem's parts were scattered around the whole area and Bernir could not hide his amusement.

#### [Chapter 148 Testing the new creation.](#)

The sound of some kind of liquid being poured could be heard. It was then followed by the sound of metal being singed.

"There, that should do it..."

"Are you sure boss? What if it explodes like the last time?"

"That's why we are doing it outside this time around, just hide behind those metal plates if something goes wrong."

Roland and Bernir were standing outside his home and where an empty unoccupied field was. On the ground was a four-legged contraption that looked similar to a very blocky insect. Ten meters from it were thick slabs of metal shoved into the ground.

"Okay, I'll activate the bug-bot mark 2 now."

Roland proclaimed while Bernir ducked behind the protective metal. Agni was also there and was ordered to keep his distance and alert them if any people came too close to their testing area.

“You sure come up with interesting names there Boss.”

He frowned a bit after Bernir started chuckling, he was not sure how to name this thing but it needed something to distinguish it from others. Everything that he learned from making it would be written down later into his notebook so that he would have a point of reference. The prototype looked like a big metallic bug so it was named like one, it seemed just natural to him.

After placing the wand that he used to close the golem’s ‘fuel tank’ he was ready to activate it. Previously he used something that should have been powering a heavy-duty golem or a train. He truly made a blunder due to being actually excited to see if he would be able to produce a real magical robot

‘Click’

This time around a remote was used to turn the creation on. Then Roland quickly ducked behind the other slab of metal to cover up. Even though he survived the previous explosion with some minor injuries it didn’t mean that he enjoyed it.

The small insect-like golem activated and rose up. Roland started giving it a few voiced commands to move back and forth. This time it didn’t look like it would be exploding. Previously the compartment that stored the mana fluid had gotten orange from overheating, this time around it looked fine.

“By Solaria’s tits, you’ve done it boss, you’ve made a golem!”

Bernir peeked out from behind the cover as he saw the small metallic contraption shuffling its legs around. It followed Roland’s instructions and didn’t seem to be falling apart either.

“It seems to be working but I couldn’t have done it without your help.”

“Hah, don’t sell yourself short boss, any craftsman could make those parts but almost none could actually bring life to them.”

Bernir had a certain strange look to him, his eyes were glued to the golem and they were sparkling. While this was a large achievement to Roland it was even a bigger deal to Bernir. Dwarves were born craftsmen, they strived to further their craft and golems were right on top of that totem pole.

While there weren’t that many runesmiths that could actually put runes to metal, it was enough for these dwarves to just be part of the creation process.

“Heh, I don’t think those old scruffy-bearded bastards would actually believe that I helped a runesmith create a golem!”

While Bernir was in his own little world Roland approached the small runic robot that he made. It didn’t seem that it would be exploding so he started to inspect the joints and the power source.

“It looks to be holding, I guess we can move onto phase two now.”

“Phase two?”

“Yes, we need to stress test it, if you notice something be sure to tell me during the test.”

Just like with any other prototypes, they weren't the finished product. While this small golem was now working he needed to try to destroy it. It needed to push it as hard as he could, thanks to this he would figure out the limits of his new creation.

Thus the testing continued, first the little golem needed to run as fast as it could. It shuffled its legs back and forth. The first problem was spotted as after a certain threshold the magic robot started fumbling over its own legs.

It also had a problem in keeping itself steady on uneven ground. The generic program that it had did a bad job at letting it detect smaller obstacles like rocks. Sometimes it would trip over them or fall into smaller holes.

Going over softer ground also posed a problem as it got stuck and couldn't get itself out. Only when following some specific voice commands was it able to dig itself out.

Throwing rocks at it also proved unsatisfactory as the golem was not able to react to anything in time. It was clear that even a weak adventurer could easily dance around this contraption that he made.

Next came the strength test. They started putting large rocks and then boulders onto the golem to see if it could move the same with added weight. It was actually surprisingly sturdy but the slowdown was quite noticeable after a certain threshold was reached. Next was an easy pull test where the golem had to try pulling a large rock behind it which was quite surprising as it did have some pulling power.

This was then followed by a flipping test. This was one of the tests that it outright failed. It remained on its back like a turtle with its legs flailing around. It was clear that if he wanted it to be able to function after getting flipped he would need to add some changes.

One such change could be to add a wider range of motion to the legs. The joints could become looser if that was attempted so he could also add something to the golems back that would flip it over instead.

"Are you sure about this boss?"

"Yeah go ahead."

Bernir gave out a sigh while hefting a sledgehammer over his shoulder. Soon he swung it down on the golem that he helped make. The hit forced the metallic construction to buckle under pressure and Roland was quick to note everything down.

"Put some strength into it!"

This would be the last test of the day and Bernir clearly was saddened by the fact that he needed to destroy the bug-bot mark 2. Following the instructions, he delivered a hard blow to the body which now left a clear mark.

The golem's legs gave out and one of the joints came loose. Roland kept looking as after the damage was done the golem started acting strangely. It was all over the place, it couldn't keep its balance and the three working legs were spasming out.

"Interesting, even though it should be able to keep itself upright with only three legs, it can't."

It was clear that the runic program that was responsible for this golem's functions was not designed to take losing even one leg into account. If it shifted its weight and let the other three legs take some load off, it should be able to still function.

"Try hitting the other side now but don't damage the golem core."

While it was fine to destroy the golem's body it would be a big loss if the golem core was damaged. Roland didn't know much about the golem's inner workings but inside of that core would be the information.

It might have looked like he was just destroying his golem and testing its resistance. But, the runic program he put into the golem had a helpful feature. This feature was discovered in one of the books that the Professor gave him.

It allowed the golem to store limited amounts of data that could be analyzed later. With the timestamps that he was sure to make in his notebook, he would need to figure out to what this data corresponded.

Luckily for him, he would not need to go through a tedious process of elimination like he did when he first tried working with runic components. No, this time around he had some research that the Runic Magus had lent him. With it, as a reference, his progress would be a lot faster than before.

"Well then, think we are done here..."

Roland looked at the beat-up remains of his golem. He bent down to pick it up and even now the contraption was still moving. If the golem core was not damaged it would keep sending signals to the intact runic components.

This caused this contraption to look a bit strange as it was flopping the half-broken legs around in random directions. With a click of the switch onto the remote that he made the golem was disabled and it stopped moving.

As he was about to leave though, he heard a loud howling that came from where Agni was ordered to remain.

"What is it boy? Did you sense someone?"

Roland and Bernir moved to where the Ruby Wolf was making noises. When they arrived they could see him growling at the nearby forest area. Neither Roland nor Bernir had any real detection skills so they could not detect anyone hiding in the bushes.

What Roland could only do was to take out his mapping orb to see if he could detect something. The map was soon displayed before him but he could not see any people nor monsters on it. The only dots that he could see were the ones for simple animals.

"It looks like he might have seen a squirrel or something, you should have seen him chase that one poor squirrel all up onto a tree, I didn't know that he could climb so well!"

Bernir gave out a chuckle while petting Agni on the head. The dog seemed somewhat offended by the gesture but there was nothing that Roland could do or say. It didn't seem that they were being watched or at least that if they were, the person was not here anymore.

All of them returned to the workshop and together with Bernir they started taking the golem apart. Everything was mapped and the damage was written down into his notebook. The last thing that he had to check for was the mana fluid tank.

Surprisingly the golem didn't burn through that much mana. From what Roland could tell, golems didn't require that much energy to function. Only when someone tried giving golems some spell-slinging functions would they require a lot of juice.

'It seems that when it comes to pure mechanical force then the golems are quite cost-efficient.'

The day turned into night and Roland was now in his bedroom noting a few things down. When he recalled all the golems that he had seen in Edelgard they all lacked such spell addons. They were mostly used for their large frames to do manual labor.

Only the golems down in the dungeon were seen to perform magical attacks. This was probably all thanks to the dungeon's nature as the monsters there were provided with mana by the dungeon itself. If he ever wished to create golems that could actively shoot magic at people he would need to take the energy problem into consideration.

While Elokin's Fluid was a power source that worked well enough, it cost a lot of money. Unless he was able to head down into the secret room in the dungeon he would need to develop another way to get around this.

'Should I bring it up with the cat?'

Roland had the option of asking the strange magical cat for help. He could very well know a better way to power the golems.

'If it's a stationary model then I think I could make it work with my current generator...'

There was a certain version of the golem that he was thinking about. This one would not be able to move but it would be able to detect and eliminate intruders.

With the wind turbines working quite fine and already powering his whole workshop there was space for innovation. While he could not create a fully functional humanoid defensive golem he could do something else, a defensive turret of sorts.

To some craftsmen, it would probably not really be a golem, more of a trap. It wouldn't really need many moving parts, just the ability to turn its cannons around to face the intruders. This was something that he needed as the mining field was already giving him a headache.

Even these golem tests that they were performing today. Normally he would like to do it behind his walls but with all the mines there it would pose a problem if the golem went berserk and ran into them.

Then there was the way that Agni acted. He was not sure but whenever he went outside to test his wares he felt like they were being watched. Even after all of these years the bad experiences from the past kept coming back.

The run in with Robert only made him more paranoid as it was clear to him that people from his family could just pop out at any moment. Even worse than them would be the members from the cult that had no idea what were doing.

Before and after coming here he did some research and this island was supposed to be free of cult influence. Luckily for him in the underground, there were more powers fighting among each other. The area he was occupying was said to belong to a different faction which should increase his safety.

Roland shook away the bad thoughts and returned to the more important issue, his store. While Elodia didn't give him a reply just yet this didn't mean that he would not be moving ahead with his plan.

He was already affiliated with the adventurer's guild so his shop could strike a deal with them as well. They could help him by selling him crafting materials that he could not otherwise get. The dwarven union was still denying him access to any of their wares. Even Bernir was blacklisted from their shops and was finding it hard to buy anything out in the markets.

They were really set on denying him but not like he cared that much as the guild prices weren't that much off. They had enough affiliated merchants from the outside to keep him stocked with the required goods.

While he was prioritized for being a Runesmith this couldn't be said for some of the other shop owners. There was only so much that could be spared and the union was really making it hard for the others to earn money.

One of the ways that the guild was trying to save their stores was with the help of the dungeon. There were some large mineral deposits there that were uncovered that could be mined. Even now some adventurer parties would be tasked to go down to get some of the dungeon-specific ores.

Roland crossed his arms and looked up at the ceiling. After the golem had borne fruit he had all sorts of ideas but he also felt like he didn't have enough time for most of them. He was only one man, going through all of the materials and books already took up a lot of his time.

He quickly grabbed his notebook and started going through it. Next to it, he had the book manual with the golem's runic program that was somewhat unclear about a couple of things. He started looking through the code that now thanks to his new title was more understandable.

An hour passed, then another and soon it was already one in the morning. Even when it was this late his eyes didn't feel tired. Ever since his stats had increased he did not sleep more than five hours a day and when he was awake he either looked at his research material or was contemplating runic code.

'If I was this hard-working in my old world I would have probably been a lot more successful.'

With no skills to guide his progress, Roland did stagnate. In this world where work was displayed on a spreadsheet on a system screen, it was easy to have something to work for. Even now, when he was ready to close his notebook a certain nudge would be given to him by this friendly world system.

Unlocked Determined Scholar.

You gain the Parallel Thinking Trait.

"What?"