The foundry in Warden's Vale was located at the end of a seven-kilometre ride to the southern side of the Citadel District. It was fashioned out of stone in the blocky theme shared by most of the buildings in Ludmila's demesne. Much like everything else, what it lacked in aesthetic sophistication, it made up for in sheer scale. Like the Faculty of Alchemy, it looked like it was constructed out of a series of conjoined warehouses occupying a block of land the size of a town.

"I can see a case for the size of most things in your territory," Frianne said, "but isn't this a bit too ambitious?"

Most of the Blacksmiths had returned to their respective villages with their Apprentices, leaving them with Smith Kovalev. He had a dozen Apprentices of his own, which was an insane number for a single Master. Even so, a Blacksmith and a dozen apprentices didn't need such a huge facility.

"Most of it is being used for storage," Ludmila said.

"It's still a lot of storage."

"I don't disagree, but it's shocking how quickly inventories collect."

"I hesitate to ask exactly what it is that you've collected."

"Bog Iron collected from the old marsh, samples gathered from around my territory, salvage from past battles...one of the advantages of the way that we build things is that it's supremely flexible. A warehouse can be converted into a workshop, classroom, or apartment. Our construction teams only keep getting better and better at it."

They entered a workshop with stations for each of the Apprentices. Most of them were already sitting at desks or preparing one thing or the other for their personal projects. At the centre of the workshop was a large forge where two Skeletons weighed down with loads of stone were turning a wheel driving a bellows attached to a pipe that was connected to one of the walls. Nearby, an Elder Lich stood on a platform, occasionally directing another set of Skeletons to shovel charcoal into the forge.

"This is quite different from the school in Corelyn County," Frianne said. "If anything, it resembles a dwarven foundry."

"That's because it's based on the dwarven foundries in Feoh Berkana rather than the Human smithies of the region," Ludmila said. "Corelyn settled on using the Human model because that's what her guild instructors are accustomed to."

"What are the advantages of this layout?"

"Having a large central forge is more efficient with many smiths," Ludmila said. "It takes less space than having a personal forge for each smith, is more efficient fuel-wise, and can achieve higher temperatures. I believe the Elder Liches have already collected enough data for the administration to promote a transition to the dwarven model across the Sorcerous Kingdom. We'll continue to make improvements, of course. The most notable one so far is the installation of a magic item that cleanses the air being emitted from the burning of so much charcoal. Feoh Berkana's forges use Heatstone, which isn't available here."

Magic items that cleansed the air were produced by Druids, so they were next to nonexistent in the Empire. Frianne supposed they were easily obtained in Warden's Vale.

"I see," Frianne said. "That makes sense, but is a facility this large necessary for your fief?"

"Though it's a foundry," Ludmila said, "the Citadel District is, for the most part, a university. This complex is also a campus. Additionally, it supplies various goods for the Royal Army and the Ministry of Transportation."

"The Royal Army? Don't the Undead have their own equipment?"

"They do, and it's all the equipment they have. For instance, Death Knights come with their plate armour, tower shield, and flamberge. This facility provides them with javelins, portable walls, chains, and so on. The Royal Army's activities thus far have identified all sorts of ways that their operational flexibility can be improved."

Is there any point in making the things 'flexible'? A single Death Knight is already a calamity.

"How large do you plan to have this 'faculty' be?"

"For now, a few hundred Apprentices. We have a Demihuman population to educate, as well. Ideally, we'll eventually have students from all over the Sorcerous Kingdom. This applies to every faculty here, of course."

While it seemed like an overambitious goal at face value, Frianne decided that it wasn't so far-fetched after some thought. If the Sorcerous Kingdom controlled a territory that spanned from the Abelian Hills to the coast north of the Azerlisia Mountains, they likely had millions of tribal Demihumans under their rule. In Human civilisation, there was one Blacksmith for every five hundred people, so it would take decades to achieve a similar ratio amongst the Demihumans – assuming they had no Blacksmiths – if the faculty only had a few hundred students.

"Will there be enough work for these hundreds of students?" Rangobart asked, "Or do you plan on having them salvage their old work like you construction crews?"

"Apprentices will begin selling their goods at Silver Rank," Ludmila answered. "Before that, it is as you say."

"Silver Rank?"

"Ah, I suppose we haven't gone over that yet. In hindsight, it might have been better to mention this right away. There are multiple 'hierarchies' in our institutions. First, is the 'professional' hierarchy, which is not too dissimilar from the Guild System. Every faculty also has its internal administrative hierarchy. The system that you may not be familiar with is how we rate vocational proficiency."

"Doesn't the Guild System already rate vocational proficiency through their ranks?"

Ludmila glanced at Smith Kovalev.

"They do," he said, "but those ranks are a large part tradition and wholly predicated on commercial standards. An Apprentice is an Apprentice both for as long as they are receiving a basic education and while they are paying off their indentures. That roughly comes out to a tenure of six to eight years, and it's become such an entrenched tradition that contracts of indenture are negotiated with that expectation in mind."

"That's interesting to hear," Rangobart said. "I always thought that an Apprenticeship was similar to being a Page or a Maid. Scions try to absorb as much as they can from the household that they work and make as many connections as they can before they're married off or enter professional service."

"It might be a *bit* like that as an Apprentice," Smith Kovalev admitted. "But it's a mostly dreary existence. As I mentioned before, Apprentices are usually stuck doing the most menial tasks in a workshop. Journeymen have priority on the promotable jobs that the Master doesn't have time for."

"I see," Rangobart crossed his arms. "That almost seems like a trap to effectively extend an apprenticeship."

"It is for some. Apprentices who don't have anywhere else to go usually end up working for the same workshop as journeymen until they earn enough recognition and capital to start their own business. If the market is too hard to break into, they'll become permanent employees of the workshop."

The latter was the most common course in the Empire. High levels of development also tended to mean industrial saturation, so the only way that a journeyman could open their own smithy was to wait for openings on the frontier. Of course, this also meant that workshops were very picky about who they signed on as Apprentices. Usually, it was limited to family or the children of fellow guild members.

"Since you're using metals to 'rank' proficiency," Rangobart said, "does this mean it borrows from the Adventurer ranking system in some fashion?"

"It uses the same progression," Smith Kovalev replied. "Copper rank is awarded once our smiths demonstrate the knowledge and proficiency to do basic work – making nails, for instance – and they challenge examinations to advance. Um, we don't make them fight like Adventurers or anything."

"Is their rank related to the metal that they can work? No, that doesn't explain copper or the precious metals..."

"If you're looking for rough equivalents, Iron-rank would be recognised as a master by the guild."

"Hah?"

Frianne was just as confused by the statement. It seemed like an abysmally low rank to assign to a master artisan. Smith Kovalev didn't hide his grin at their reaction.

"I never get tired of that," he said. "Not that I'm mocking you in any way. All of the smiths that came in after the system was implemented reacted the same way. The fact of the matter is that a master smith by the definition of the local guilds wouldn't be considered a master elsewhere. The Dwarves, for instance, wouldn't even consider a newly-recognised master smith in E-Rantel to be worthy of journeyman. 'Master' to the Human countries around here means that the smith is capable of producing masterwork items – that is, items meeting the commercial standards of the guild, and the guild's main customer base is made up of the mundane industries of the region. If you can make a plough that the local Farmers can't complain about, you're a master."

"Then where do grandmasters stand relative to masters?" Rangobart asked, "By the standards of the Empire, I mean."

"Grandmaster' is much like the 'Adamantite' of the Guild System," Ludmila said. "Or perhaps the 'realm of heroes'. They are recognised as standing at the pinnacle of their craft, but the guild has few ways to differentiate those that it recognises as grandmasters."

"That's a decent way to put it," Smith Kovalev said. "Once a Blacksmith in the Empire or Re-Estize proves themselves capable of working with Mithril, they are irrefutably a grandmaster, but recognition as a grandmaster usually happens a bit before that. It requires even more skill to work with Orichalcum and Adamantite, but every metalworker in that 'realm' is a grandmaster."

How many grandmaster smiths does the Empire even have?

It was a question that the Imperial Administration couldn't answer with much confidence. The Guilds claimed to hold their members to stringent standards, but as it was an organisation governed by its members, internal politics seeped into everything. Much to their displeasure, the institutions of the Empire – the Imperial Army, in particular – would occasionally discover that an officially recognised grandmaster wasn't as skilled as claimed.

The gap in product quality wasn't so wide as to accuse the Guilds of having falsified credentials, but comparing the huge orders that the army tended to make showed clear differences between one grandmaster and another. At best, the Imperial Army had a list of about eight grandmasters who could reliably produce goods of sufficient quality for their finest soldiers. If they needed someone who could work with Adamantite, they had to look outside of the country.

"So you've opted to adopt a system that isn't so...variable?" Rangobart asked.

"Pretty much," Smith Kovalev nodded. "I know most of the metalworkers in the region have no issues with how they're recognised, but, after travelling all over the place, I feel that it doesn't do anyone any favours. People around here aim to become masters, never realising how meagre it is in the eyes of the world beyond."

"Out of curiosity, how do you rank in this standard of vocational proficiency?"

Smith Kovalev pointed to a silver hammer and anvil pin on his collar.

"Silver is considered a highly experienced master or maybe even a grandmaster by the standards of the local guilds. I would rank as a journeyman by the standards of the Dwarves. Considering how much of my life has been spent travelling, I think I'm in a pretty good spot."

Frianne let out an internal sigh of relief at his response. Warden's Vale already had enough ridiculous things going on. She wouldn't know what to think if a genius smith existed in a fief that didn't even have a metalworking industry until recently.

"Mister Kovalev," a voice piped up from nearby, "can you check this?"

Rangobart looked over his shoulder and stepped aside to let an adolescent boy through. He placed a vaguely familiar contraption on Smith Kovalev's desk. Frianne eyed the silver pin on the Apprentice's collar.

Does that mean this boy has the same vocational skill as a highly experienced master smith?

They watched as the older smith examined the boy's work. Frianne finally realised what he was holding.

"Isn't that part of a distillation apparatus?" She asked.

"Yeah," Smith Kovalev responded absently, "it's the coil for an alchemical still. The Alchemists somehow blew one up yesterday."

"I thought the Apprentices worked in the mornings," Frianne said. "Is it an emergency order?"

"Nah, it's the replacement for the still that they replaced the blown-up still with. Tomas here is a Toolsmith, so this is the type of thing he likes fiddling around with."

Without warning, Smith Kovalev dropped the coil. It bounced twice like some sort of giant spring before rolling twice over the stone floor.

"Oh, you made it bouncy."

"Yup!" Tomas said, "The coil on the other still got flattened in the explosion, so I thought that making this one springy would save one from the next explosion."

They expect the next one to explode...

"The idea's worth exploring," Smith Kovalev said. "What about the boiler part? You figure out how to make it non-explodable?"

"It isn't *supposed* to explode in the first place," Tomas grumbled. "Whatever the Alchemists stuck inside made something explosive. All I can do is make sure that there aren't any leaks and that the cap will pop off before the boiler ruptures. I reinforced the boiler for good measure."

"Is that all you can do with the equipment? What about adding some sort of feature?"

Tomas picked the coil up off of the ground.

"Feature...maybe? I'll think of something for the next one."

"What are our copper stores looking like after making this thing?"

"I think we have enough for about three more of these, but I can melt down the broken stuff I've been studying."

With that, the boy left with his coil of copper tubing. Smith Kovalev took a booklet out of his desk and started writing something.

"He was wearing a silver pin," Frianne said. "Does that mean he's as 'vocationally skilled' as you are?"

"There are nuances," the Blacksmith replied. "Every rank has a range of skill that it covers, much like with Adventurers. Additionally, as I mentioned, Tomas is a Toolsmith. I'm a Blacksmith."

"But Blacksmiths are capable of crafting tools as well."

"We can," Smith Kovalev nodded. "But Toolsmiths are specialists. Blacksmiths are generalists. I'm sure you know of at least a few artisans who make certain goods. Someone renowned for making swords, for example."

"I am aware of such individuals," Frianne said, "but they're still Blacksmiths. A man who is famous for forging fine swords can still make a pair of pliers or a pitchfork."

Choosing to exclusively forge swords was simply a preference. Or a conceit, according to some. She had visited so-called specialists on several occasions with her family and the absurdly pretentious behaviour of the high-profile artisans and their staff convinced her of the latter.

"Yes, they can," the Blacksmith agreed. "But specialists are better at the things that they specialise in. We may both be Silver-rank smiths, but Tomas will make better tools than I can. By the same token, I can make anything else better than he can."

"But that's because Tomas is dedicating his time and talents to toolmaking," Frianne said. "He will naturally be better at making tools and his proficiency in everything else will suffer as a result."

"Indeed."

Frianne couldn't help but frown at Smith Kovalev's response. He seemed to be attributing something special to what was otherwise common sense. Had he picked up some weird knowledge from somewhere during his travels?

Beside her, Ludmila showed no particular reaction to their conversation. It was expected for a Noble to rely on the experience and know-how of experts, but after seeing Master LeNez and now Smith Kovalev, she was getting the feeling that Ludmila had surrounded herself with some questionable characters. It was hardly unheard of for one Noble or another to latch onto a compelling, yet ultimately delusional idea.

"How many different specialists do you have here?" Frianne asked.

"Half of my Apprentices are Blacksmiths," Smith Kovalev answered. "Two are Weaponsmiths, two are Armoursmiths, Tomas is our one Toolsmith, and we have a Jeweller."

"Jewellers are smiths?"

"That's why we have Goldsmiths and such, yeah?"

"I suppose that is the case," Frianne admitted. "So, even with the option to specialise, half of your Apprentices choose to become 'generalists'."

"Half of my Apprentices, yes. In the company overall, roughly four-fifths are studying to become Blacksmiths."

"Why is that?" Dimoiya asked, "Wouldn't most people go for the highest-profile job?"

The Blacksmith's dark moustache twitched as he smirked for a split second.

"I hope you'll forgive me for saying so," he said, "but that's a question only the wealthy or at least city dwellers would ask. I suppose that's why the harbour has a higher ratio of those 'high-profile' jobs – it's effectively the 'city' here. The fact that someone is a Weaponsmith, Armoursmith, or Jeweller is useless to most people. That's why you pretty much don't see any in towns or large villages."

"What about those legends where the legendary heroes have to go on a dangerous journey to find a legendary smith in the middle of nowhere to make them a legendary sword?"

Smith Kovalev snorted.

"That's a lie, obviously. The 'legendary smith' still needs to eat, so they'll be living close to their client base. Never mind that a smith living in the middle of nowhere is likely to get robbed, raided, or eaten by monsters."

"Aw."

"Blacksmiths are the 'celebrities' of the smithing world," Smith Kovalev said. "Most of our Apprentices chose to be Blacksmiths because the demand for their skills is universal and they're what most people know."

"I have a question related to that point," Frianne said.

"Sure, let's hear it."

An Apprentice started hammering away at a piece of orange-hot metal nearby. Frianne shifted closer and raised her voice.

"You've expressed your conviction over this new ranking system being superior to the regional measures of the Guilds, but does it have any tangible value beyond being something that only those within the profession might recognise? As you've mentioned, guild standards are connected to commercial realities and very few places can support specialists. What merit is there to raising 'Silver Rank' smiths when the vast majority of their work will be what you consider 'Iron Rank'?"

"So you're saying that our students should aspire to mediocrity?" Smith Kovalev asked, "That they exist for the convenience of everyone else?"

"That wasn't what I meant," Frianne answered. "It's just that, from the perspective of an administrator, it feels like a waste of resources for a vocational institution to train to levels of proficiency that a mere fraction of a per cent of the population only occasionally makes use of."

"That's exactly how the Guilds operate," Smith Kovalev placed his hands on his desk. "Everything revolves around being competitive from an economic standpoint. *Efficient*, businesswise. It's the mindset of a person who lives in a box. Of course, there are times when one might be driven into that box, but that's no reason to stay inside it once one has the leeway to step out and look around. The world is a big place and only a fool would think they know everything that there is to know. Just like the magic schools or the military academy, we're also a part of this university. Our faculty explores the world of metalworking not just as a matter of professional pride, but also for the future benefit of our people."

"Then what are your goals for the faculty? Is there some plan with set objectives and timeframes? What new technology, feat of engineering, or advancement in material science do you aim to achieve?"

The Blacksmith straightened and sent a questioning look at Ludmila.

"Not that I disapprove," Ludmila said, "but is there some reason why you choose to be so confrontational in your lines of questioning? I noticed the same thing with Master LeNez."

"A workplace habit, I suppose," Frianne sighed. "I've spent the last few months auditing every department in the Ministry of Magic. Everyone defends their work as essential, revolutionary, or some other important-sounding term. The fact of the matter, however, is that the Ministry has a set budget that I must justify to the Court Council and I don't have anywhere remotely near the clout of the former head."

"...and here I thought you would have the chance to relax in Warden's Vale."

Frianne offered Ludmila a tired smile.

"I'm afraid my work follows me everywhere. Surely, you must experience something similar as the head of your house?"

"Similar, perhaps, but I doubt that my burdens are anywhere near as heavy as yours. At least they don't feel so burdensome. Kovalev, would you be so kind as to share some of your findings?"

"Of course, my lady," Smith Kovalev said, then paused. "Since the focus of our efforts has been to lay the foundations for vocational education, the 'findings' that we have come in the form of our Apprentices. Tomas is one such example. The equivalent of a Silver Rank in our system is nearly unheard of in the Guild System."

"How old is he?" Frianne asked.

"Thirteen," Smith Kovalev answered. "He started apprenticing with me not long after I arrived in Warden's Vale a bit over a year ago."

"How do you determine that he qualifies for his rank?"

"...if you didn't know, all artisans have the ability to appraise products of their respective crafts. We've also anonymously submitted his work to the E-Rantel Blacksmith Guild for an external assessment. Certified masterwork goods started coming out of Tomas' work around midwinter."

Impossible...

A child becoming a master artisan in less than a year? Children learned quickly, but not that quickly.

"It sounds like you have a true prodigy on your hands," Frianne said. "How far have your other Apprentices advanced?"

Smith Kovalev peered at Frianne for a long moment before issuing a bellow that made her jump.

"Faber!"

A minute later, the little girl from the crab claw duelling table appeared. She stared up at them with her big, brown eyes.

"Am I in trouble?" She asked.

"No, not at all," Smith Kovalev answered. "I just wanted to introduce you to our guests. This is Quirina Faber. She's the top Weaponsmith in Warden's Vale."

"Hi," Quirina said.

Frianne stared down at the girl. She couldn't have been more than...eight? Nine?

"How old are you, Quirina?" Frianne asked.

"Seven," the girl answered.

"S-Seven?" Frianne looked across the desk at Smith Kovalev, "I don't see a pin on her..."

"It's in her hair," the Blacksmith told her.

Frianne's gaze went back to the girl, fixing onto the golden hairpin glistening in the magical light.

"...I thought it was a hairpin," Frianne said.

"It is," Smith Kovalev said. "It's also her rank pin."

Upon closer inspection, the hairpin was fashioned in the form of a golden stiletto.

These people are really-no, more importantly...

"How is this possible?" She asked, "How long has she been studying..."

Even if she had somehow been smithing from an even younger age, it still didn't explain her advancement.

"Quirina started at the same time as Tomas," Smith Kovalev replied. "They came to Warden's Vale on the same ship."

Dimoiya leaned forward and poked Quirina in the cheek. The girl flinched back.

"She's real!" Dimoiya said.

"Huh?" Quirina rubbed her cheek, "Can I go back now? Bearbear Mark IX is waiting for me."

"Could you show our guests your work?" Smith Kovalev asked.

Quirina nodded and walked back to her workstation. They filed past the Apprentices to follow her to the far corner of the workshop.

"How would she measure by dwarven standards?" Rangobart asked.

"She would be considered a master by the Dwarves," Smith Kovalev answered, "but they'd probably shave off their beards before admitting it."

"Can she work with Mithril?"

"Technically, she should be capable. Theoretically, a smith should be able to produce masterwork Mithril goods somewhere in Platinum Rank. We're still trying to secure a supply of Mithril, though. As fast as we may advance here, some things are still as slow as ever."

When they arrived at Quirina's anvil, they found a single long blade laid over it. To the side was a line of longswords with curious-looking pommels.

"They're so cute!" Dimoiya exclaimed.

Quirina giggled in response. Each sword had a pommel that looked like the head of a toy bear. Frianne stared at the masterwork blades in silent resignation. The Court Council was *definitely* going to think she had gone insane.