

Becoming a Priest



AT THE AGE OF TWENTY JOHANN FACED one more roadblock in his life. He had just finished a two-year course of study. Now Johann didn't know what to do. He wanted to go to a university, but how could he afford it? He had to think this through. By now he had practice solving problems and overcoming roadblocks.

Johann came up with a plan of action. He decided to speak with Professor Franz. That turned out to be a good plan, for Franz was eager to help. So the two of them sat down to talk about Johann's future.

Professor Franz knew that Johann wanted to

learn more about science. And he knew a way to do it. He suggested that Johann join the monastery in Brünn. Professor Franz himself had lived in the monastery while teaching in that city. Recently a friend at the monastery had written to Professor Franz. He asked him to speak with young men about becoming monks. Professor Franz agreed to recommend the best young men, and now he was talking to one of them.

Johann thought long and hard about what he heard. He would be joining the Order of Saint Augustine. He would follow a code of rules and wear a tunic and cape. What would his life as a monk be like?

Then he remembered Father Schreiber, the priest from his hometown. Father Schreiber taught science and even wrote a book about it. He also knew a lot about fruit trees. He had picked out many young trees from France and had given them to the people at home. Johann knew one person who received some of the young fruit trees—his father.

Johann saw that if he could learn about science, he could put it to good use. So he decided to take up Professor Franz's suggestion. He would join the monastery and would no longer worry about having enough food to eat. Then he would become a priest. In his spare time he would study science.

On July 14, 1843, Professor Franz wrote to his friend at the monastery. He told him all about Johann. In his letter he described Johann as "a young man of very solid character."

On September 7, 1843, the Order of Saint Augustine accepted Johann. Then on October 9, he moved to the monastery and had a new home. That day he also had a new first name. He chose it as his religious name. From now on he would be known as Gregor.

The monastery of Saint Thomas was founded in 1359 and moved to a new location in 1783. Surrounded by small houses, it was at the edge of the city of Brünn. The building had just one floor with an attic and covered a large area. At the rear of the building was a small clock tower



In 1843, Johann Mendel became a monk when he was accepted into the Order of St. Augustine. He would now be known as Gregor Mendel.

above the library. Below was a small garden. It was here that Gregor would do his famous experiments with peas.

Brünn was the capital of a place called Moravia. (Today Brünn is called Brno, and is located in the Czech Republic.) The name of the city meant "hill town." It marked the spot where two rivers flowed together.

Gregor spent those first days getting to know his new home. What a change it was from his old village! Yet in some ways it was similar. It was peaceful and quiet here with plenty of time to think. But was he cutting himself off from the rest of the world in this place? Could he still learn about science here?

Gregor did not need to worry. Cyrill Napp, the abbot, or head of the monastery, was a man of great energy. He was making this place into a center of learning. He invited great scientists and artists to visit the monastery and share their knowledge. Abbot Napp was a good host.

Gregor soon learned that many of his fellow monks were also scientists. They taught science to high school and college students. Gregor could hardly believe his good fortune. Here was his chance to learn firsthand about science from those who knew it. He later wrote that his "fondness for natural science grew with every fresh opportunity for making himself acquainted with it."²

Abbot Napp was always looking for monks with a talent for science. Gregor soon caught his eye. Abbot Napp told Gregor about botany lectures at a college nearby. At these lectures Gregor learned how to pollinate plants by hand. He would use what he learned in his experiments with peas.

Abbot Napp was a man of many talents. He wrote a book about growing improved kinds of fruit trees. He helped raise money to fix up the monastery buildings. And he was director of high school education in the area.

Abbot Napp also insisted that all rules be followed. One time he had to remind Gregor about this. Gregor was attending the classes he needed to be a priest. Abbot Napp found out that

Gregor was attending classes without wearing the proper cap on his head. He made it clear that Gregor must wear a cap like the other students. Rules are rules, said Napp. There would be no exceptions.

Gregor attended classes at the Brünn Theological College. He began his studies in 1845 and completed them in 1848. In their reports, his teachers described him as a hard



The head of the Brünn monastery was Abbot Napp, who Gregor Mendel (standing second from right) looked up to and respected. Napp is pictured here in the front row, seated second from the right.

worker with high character. With their blessing, he took the vows to obey the rule of Saint Augustine. By the time he was twenty-five, Gregor achieved what his mother had hoped for. On August 6, 1847, he became an ordained priest. He would now be known as Father Mendel. Due to a shortage of priests, Mendel became one before he finished his studies.

A year later Mendel became assistant pastor at a church in Brünn. Most of the church members were Germans, though a large number were Czechs. Mendel spoke German and always thought of himself as a German. Now he needed to learn the Czech language because he had to speak it from time to time. Mendel was trying to adjust to all the changes in his life. While he was learning the job of a priest, big changes were happening outside the church.

Revolution was in the air. The Hapsburg rulers were losing power and the Czech people were demanding their rights. Before long the uprising was over, and a new government came to power. Again the people had little freedom,

but one good thing happened. The forced labor that Mendel's father had to perform was over.

Meanwhile, Mendel struggled with his own job. He had no problem preaching to the church members. His problem was the daily visits he made to the sick and dying. Mendel had always been a nervous person. Now when he saw sick people, Mendel began to feel ill himself. Soon he found it more difficult to carry out all his duties as a priest. He now had another problem to solve. What could he do?

This time, though, he didn't have to solve it all by himself. Abbot Napp had a plan for him.



Becoming a Scientist



ABBOT NAPP'S PLAN WAS TO RELIEVE Mendel of his duties. Napp had sent a letter to the bishop. He stated that Mendel would be much better as a teacher than as a priest. Napp was well aware of all the time Mendel spent learning about science. He felt Mendel could share some of his knowledge with high school students. Since Abbot Napp was head of high school education, he knew where Mendel might fit in.

In September 1849 Mendel received his appointment. He would teach mathematics at the high school in Znaim, a town in southern

Moravia. However, his teaching job was only temporary. To gain a permanent job, Mendel would have to pass an exam for high school teachers.

For now Mendel was eager to start. He had no training in teaching, and of course, did not have a college degree. Yet he did have experience as a tutor. So he began at once to learn his new job. The students and the other teachers liked their new teacher. Mendel's hard work and honesty came out in his teaching.

Sometimes, though, he was a little too honest. One day the bishop came to inspect the high school. Mendel and Bishop Schaffgotsch did not always agree on things. The bishop was also very overweight. On the day of the inspection, Mendel without thinking spoke what was on his mind. Mendel remarked, "He carries about with him more fat than understanding." His words got back to the bishop, who of course was none too pleased. The two of them would continue to have their differences in the years ahead.

The rest of the school year passed quickly.

The other teachers urged Mendel to take the teacher's exam so he could get a permanent job. For Mendel this was a big step. Nearly all teachers took this exam only after years of study at a college. Yet he could take it without college training. After all, he had spent years of his life learning on his own.

So he decided to take the exam for science teachers. He received his test papers on May 10, 1850.

The first question was about the weather. Mendel had to explain all about the air and how winds happen. The second question was about geology. Mendel had to explain the differences between rocks formed by water and by heat.

Mendel had several weeks to complete this written test. In July, Mendel learned that he had passed the first question, but he failed the second. Yet the exam was not over. There would be more tests in August, and for these Mendel had to go to Vienna, capital of the Hapsburg Empire.

Again Mendel had two test questions. For the

first question, Mendel had to explain all he knew about magnetism. For the second, he had to explain all he knew about mammals. Mendel passed the first question. He didn't pass the second one. He really didn't know much about mammals, but he tried to come up with an answer. Mendel then took an oral test of his science knowledge. Mendel failed, and the exam was over.

Mendel was very disappointed. Try as he might, he just couldn't make up for his lack of training. Still he would not give up. He would just have to work harder. He would go on learning on his own if he had to. Mendel went back to the monastery full of plans for his future.

In 1851 Abbot Napp wrote to one of the professors who had tested Mendel. Napp wanted to know why Mendel had failed his exam. The professor, Andreas von Baumgartner, replied that Mendel needed training in science. Baumgartner thought Mendel should go to the University of Vienna. It didn't take much to convince Abbot Napp that this was the best thing

to do. He quickly made the plans, and in October Mendel was on his way.

Mendel had to fend for himself, since there were few rooms in the monasteries in Vienna. He did manage to find a room in a religious house. Now he could turn all his attention to science.

Mendel was lucky and he knew it. For the first time in his life, Mendel had the freedom to pursue his favorite subject. He was going to make the most of it. He would always be grateful to Abbot Napp for giving him this chance of a lifetime. Mendel was now twenty-nine years old.

Mendel's first class was in physics. His teacher was Christian Doppler, who was famous for discovering the Doppler effect. A person standing near an approaching train will notice the Doppler effect. As the train approaches, the whistle sounds shrill. As the train passes by, the whistle sounds deep. The whistle sound seems to change. That's because the whistle is moving first toward the person, then away.

Professor Doppler taught Mendel how to do experiments. Mendel would later use some of

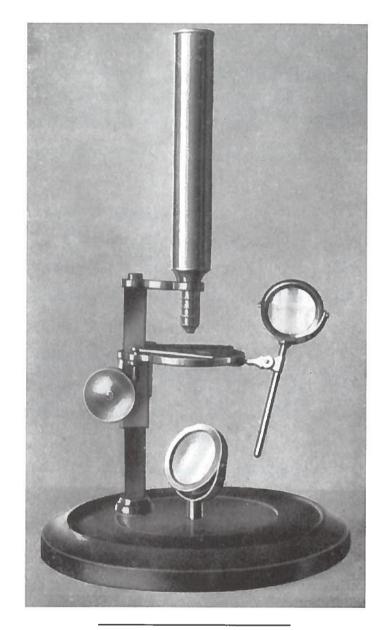
what he learned in his own experiments. Doppler also taught Mendel more about mathematics and how to use it. This too would be valuable later.

Mendel was starting to feel more comfortable in the world of science. He was starting to think like a scientist. In fact, he was becoming one.

He continued to learn about physics. He came across a book written by an author he instantly remembered—Professor Baumgartner. He had tested Mendel about the weather and magnetism for the teacher's exam. In his book Baumgartner talked about what scientists try to discover and how they do it. Mendel studied the words carefully. He was seeing a whole new way of looking at nature.

Mendel read that nature follows certain rules. The goal of scientists was to discover these rules and explain them. At first, Mendel did not see how to do this. Then he read on. Carefully planned experiments were the key to finding the rules.

During his Christmas break at Brünn,



Abbot Napp sent Gregor Mendel to the University of Vienna for training in science. Mendel would use this microscope to help him teach science to students.