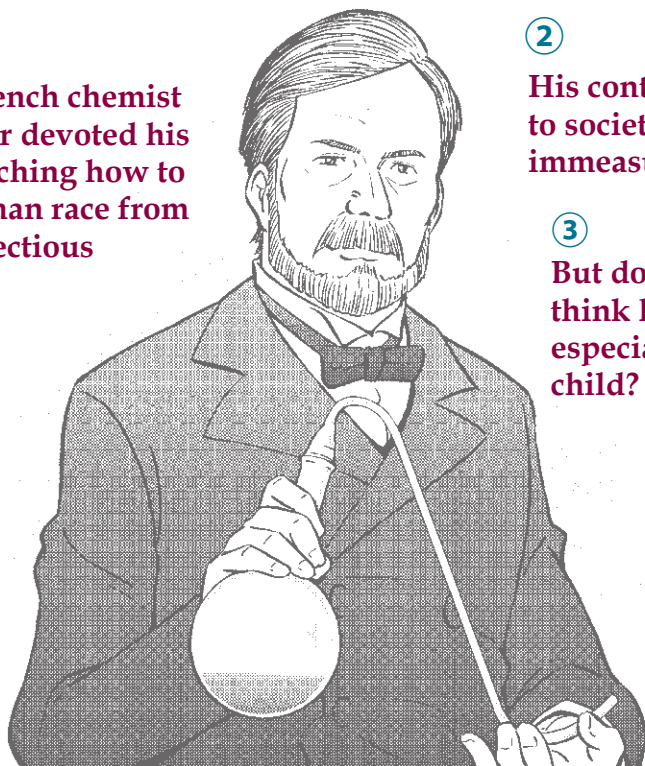


Pasteur: A man who saved people from infectious diseases

1

The great French chemist Louis Pasteur devoted his life to researching how to save the human race from dreadful infectious diseases.



2

His contribution to society is immeasurable.

3

But do you think he was an especially smart child?

Louis Pasteur (1822-1895)

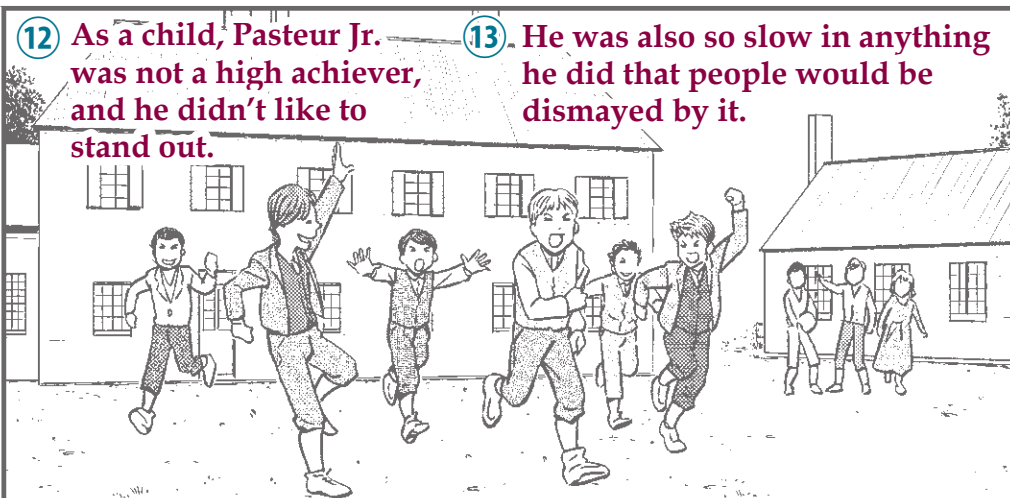
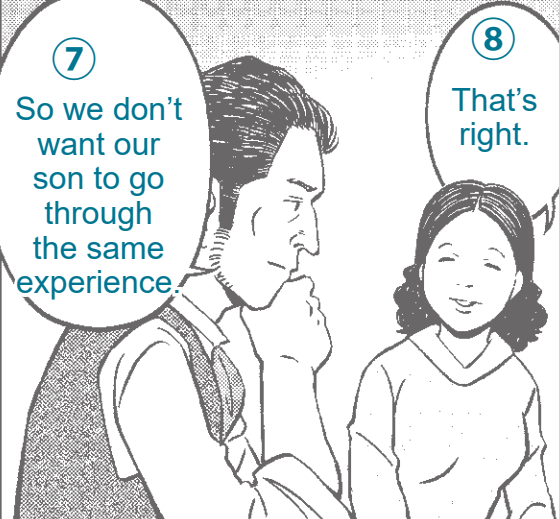
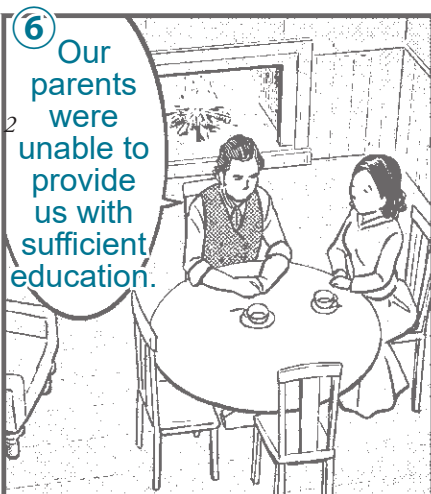
4

Pasteur's father was an artisan in a small town in east France.



5

Pasteur Sr.'s shop, which he ran with his wife, was so small that they had a hard time making ends meet.



14

You're a laggard.

15

You still don't have the answer?

16

Hey, what does this mean?

17

If I don't figure it out, I can't progress.

18

More questions?!

19

What a bother he is!

20

However, the principal shrewdly saw through to his excellence.

21

Although he needs additional time to study, he's a deep thinker.

22

He may not be a genius, but he would make a fine scholar.

24

How about letting him study at the École Normale Supérieure in Paris?

23

The principal urged his parents.

25

Paris...

26

I'm glad he praised our son...

27

It will cost too much...

28

It seems beyond our family budget...

29

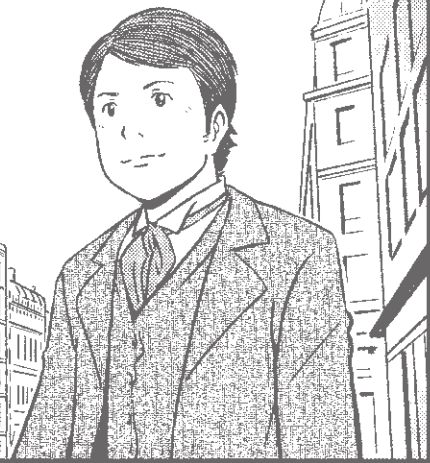
After long deliberation, father and mother decided to let him go to that school.

30

We can't give up on our son's future.

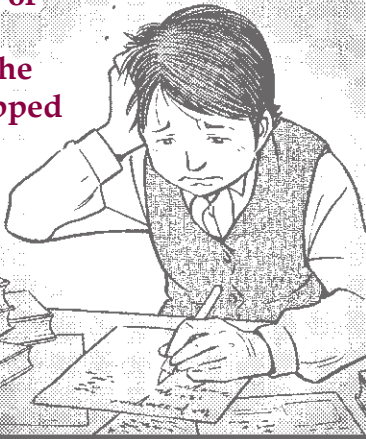
31

Aiming to pass the entrance exam for the higher normal school, Pasteur enrolled at a prep school in paris when he was 15.



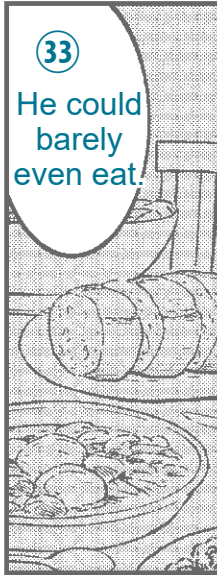
32

At the beginning he was full of hopes, but gradually the lessons slipped out of his head.



33

He could barely even eat.



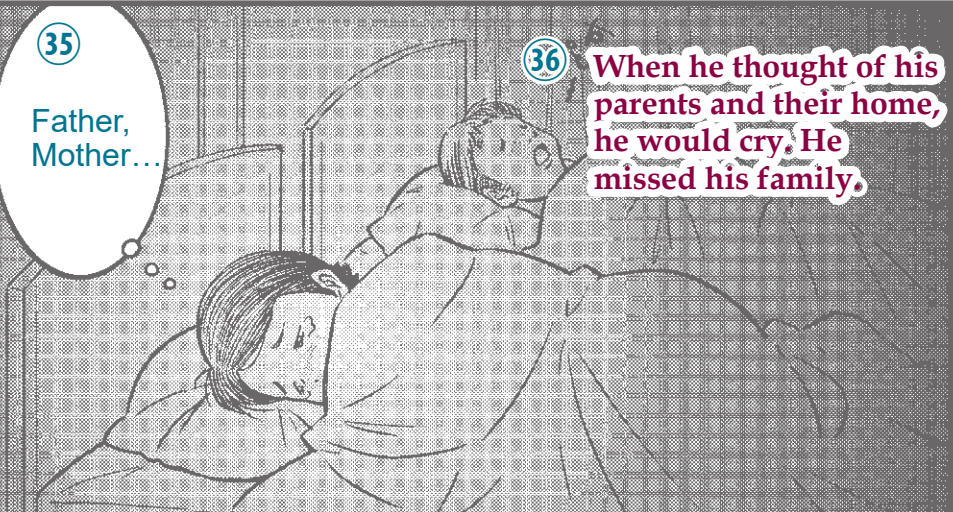
34

He could not even sleep well.



35

Father, Mother...



36

When he thought of his parents and their home, he would cry. He missed his family.

37

Trying to reassure his parents, he would write in his letters that he was fine.

However, parents are sensitive to any slight change in their children's behavior.

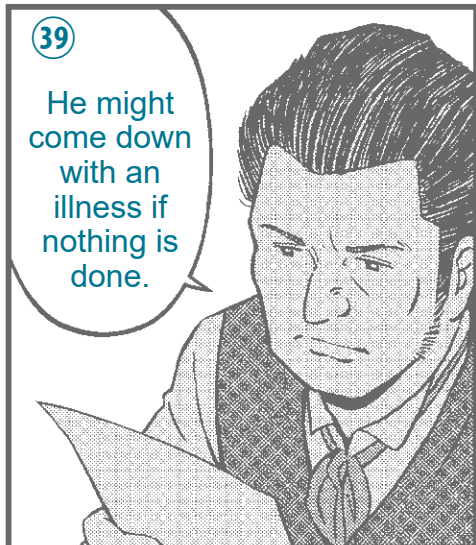


38

Something is wrong.

39

He might come down with an illness if nothing is done.



40

One morning...



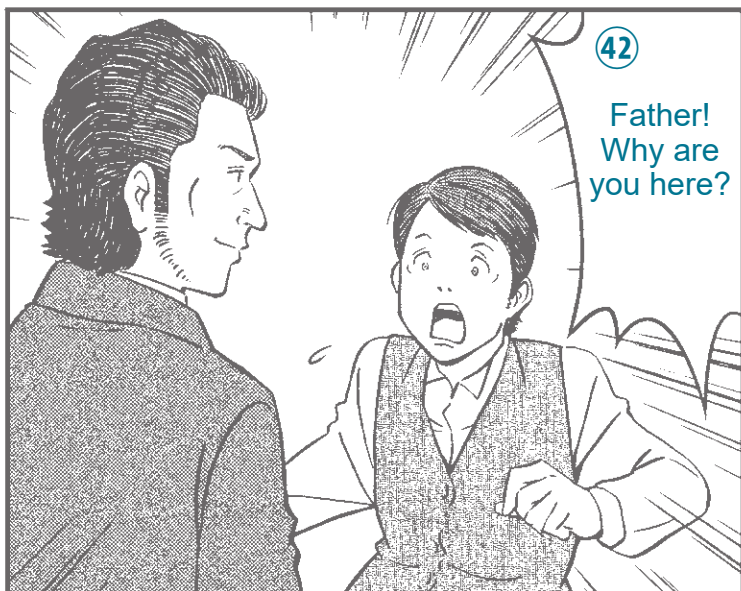
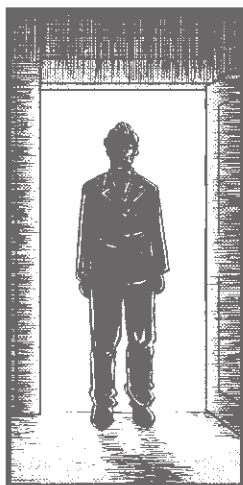
41

You have a visitor.



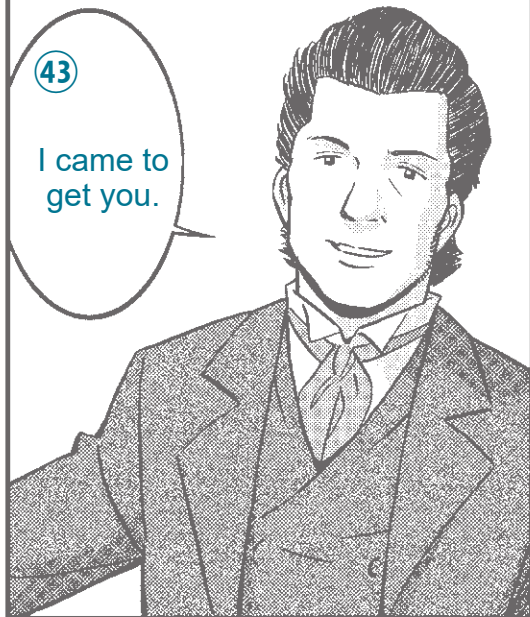
42

Father!
Why are you here?



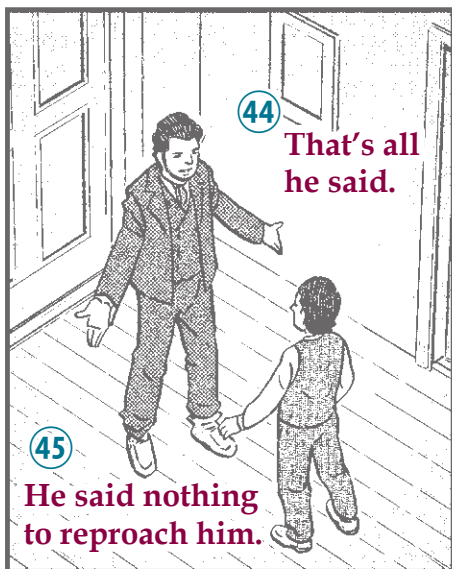
43

I came to get you.



44

That's all he said.

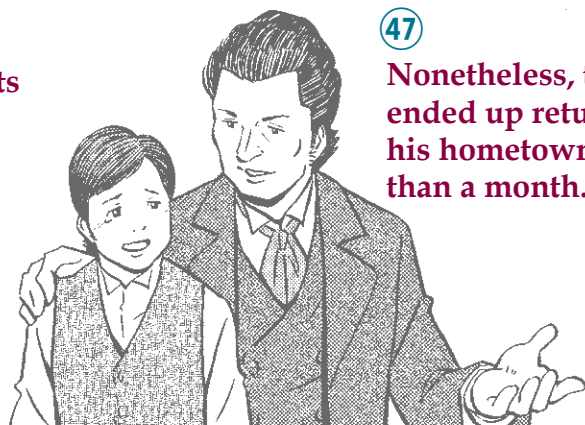


45

He said nothing to reproach him.

46

Pasteur's parents had put in painstaking effort to find money to send him to Paris.



47

Nonetheless, their son ended up returning to his hometown in less than a month.

48

If his parents had scolded him or expressed complaints, Pasteur would never have gone on to achieve what he did in later year.

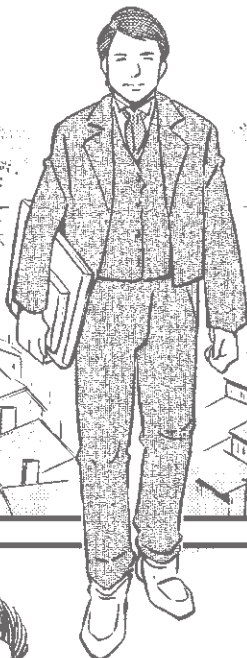


49

You don't need to rush.

50

After returning to his hometown, he started restudying at a nearby school.

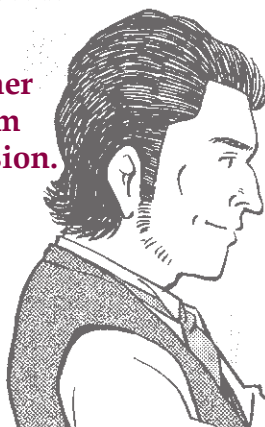


51

In the meantime, he felt the urge to go to Paris again. It seemed he had confirmed his determination to become a chemist.

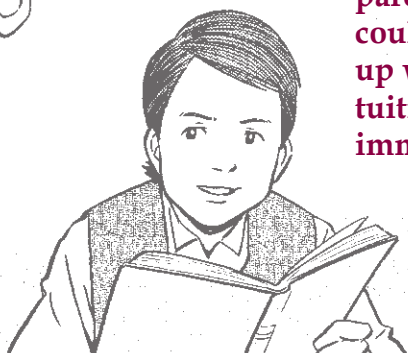
52

His father gave him permission.



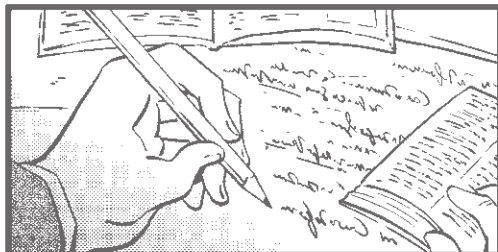
53

However, his parents couldn't come up with the tuition fee immediately.



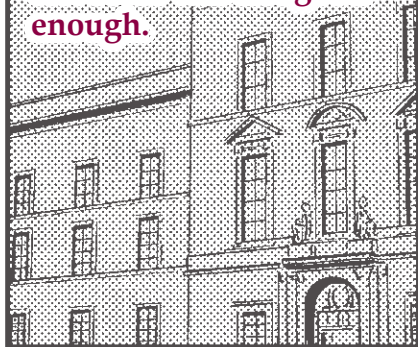
54

Pasteur took his time to overcome his weak subjects.



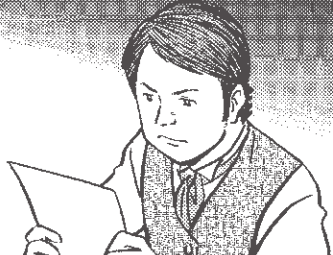
55

In four years, he took the exam for the higher normal school, but his test score was not good enough.



56

With this score, I can't go to that school.



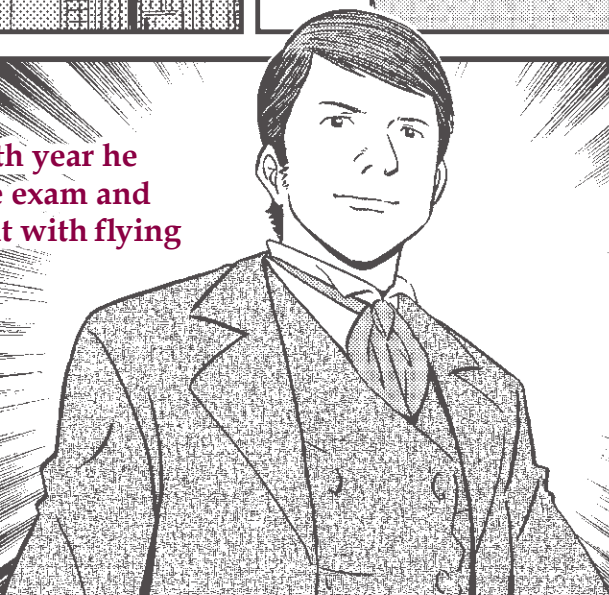
57

I will spend one more year preparing until I am confident.



58

In the 5th year he took the exam and passed it with flying colors.

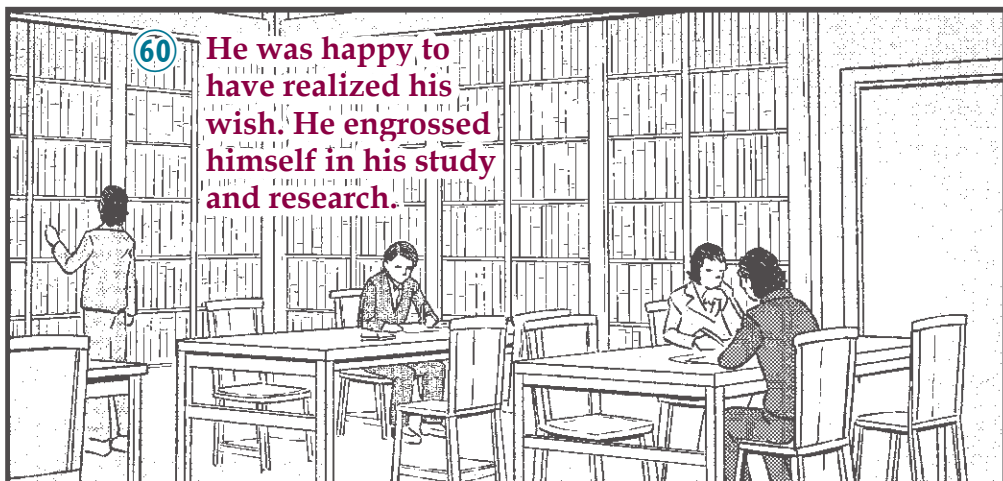


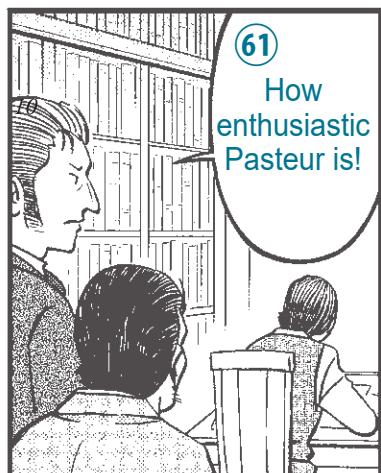
59

He was 20 years old.

60

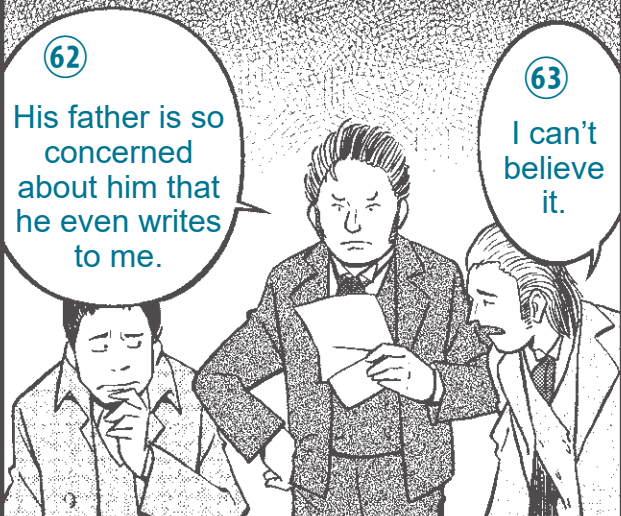
He was happy to have realized his wish. He engrossed himself in his study and research.





61

How enthusiastic Pasteur is!

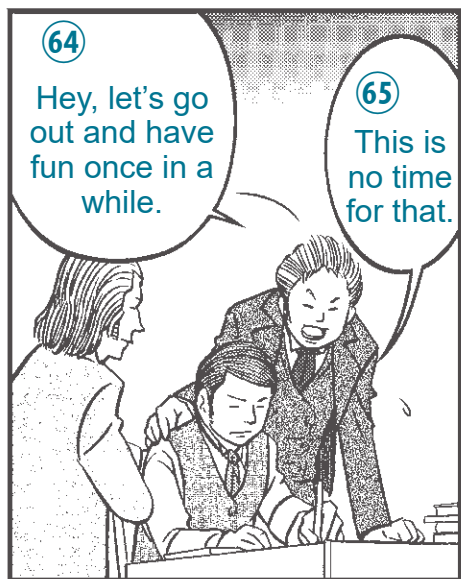


62

His father is so concerned about him that he even writes to me.

63

I can't believe it.

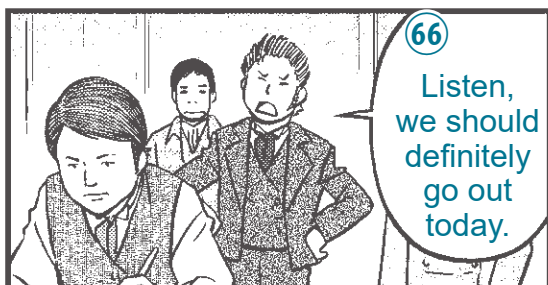


64

Hey, let's go out and have fun once in a while.

65

This is no time for that.



66

Listen, we should definitely go out today.



67

If you insist...



68

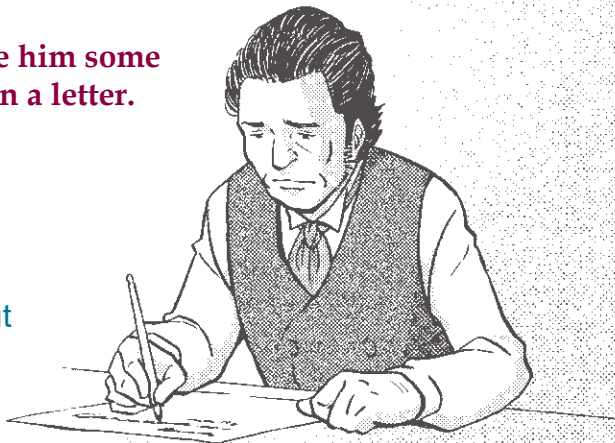
Pasteur gave in to his friend's persistence and went out for a walk, but...

69

...while having a walk they engaged in a serious discussion on chemistry rather than relaxing.

70 His father gave him some gentle advice in a letter.

71 I hear you always study until late in the evening. I'm very worried about you. What would you do if you became sick?



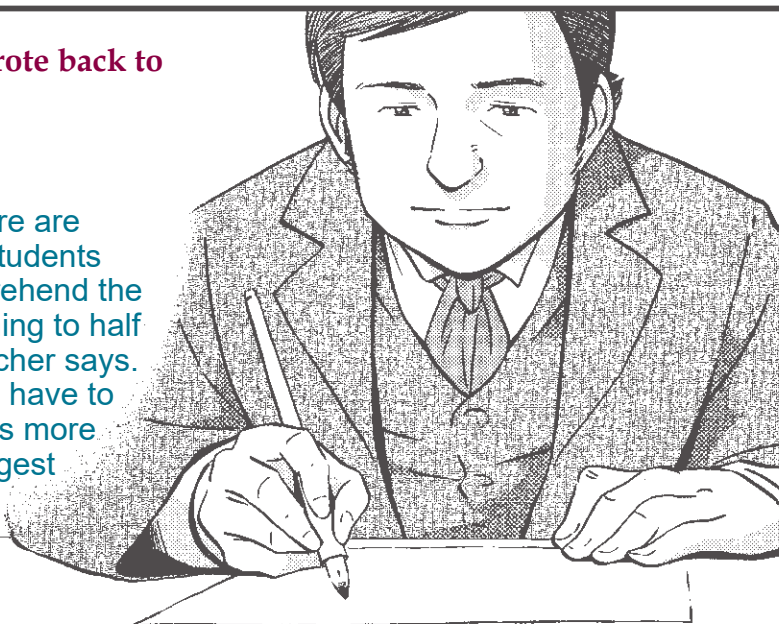
72 Father...

73 You don't need to feel pressed. I have enough money to keep sending your allowance. So please put your heart at ease.



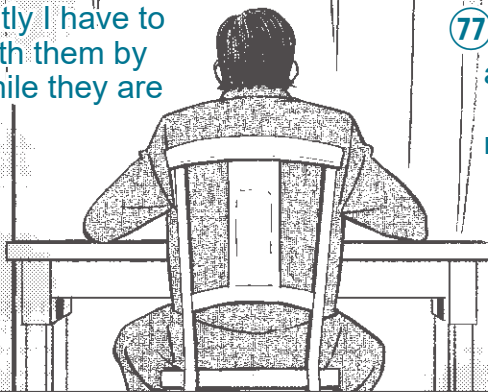
74 Pasteur wrote back to his father.

75 In my class there are some brilliant students who can comprehend the lesson by listening to half of what the teacher says. But as for me, I have to take a few times more than them to digest and grasp it all.



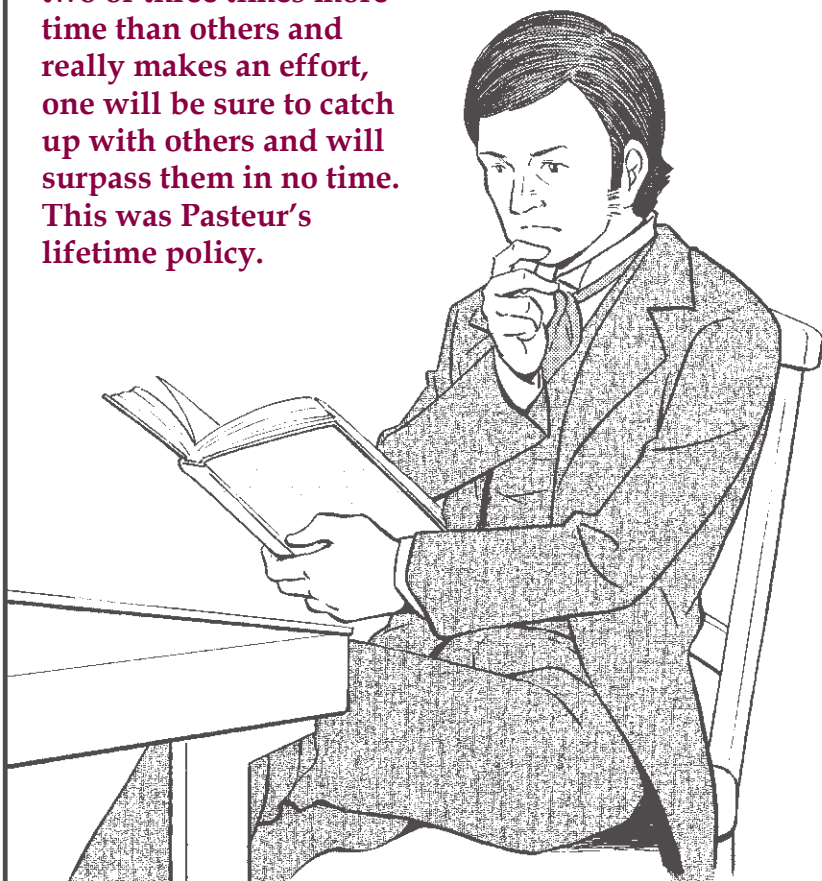
76 Consequently I have to catch up with them by studying while they are sleeping.

77 I'll be more attentive about keeping myself healthy, so please don't worry about me.



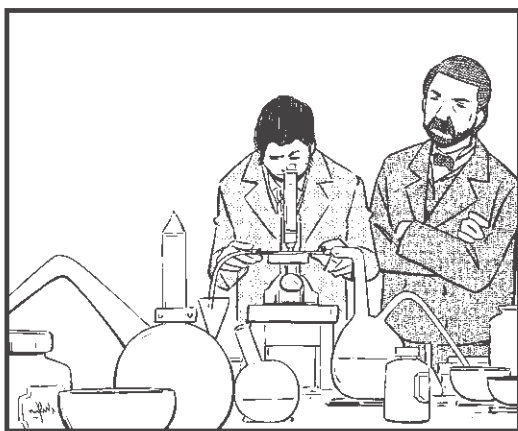
78

One doesn't need to lament or get depressed because they are not capable. If one spends two or three times more time than others and really makes an effort, one will be sure to catch up with others and will surpass them in no time. This was Pasteur's lifetime policy.

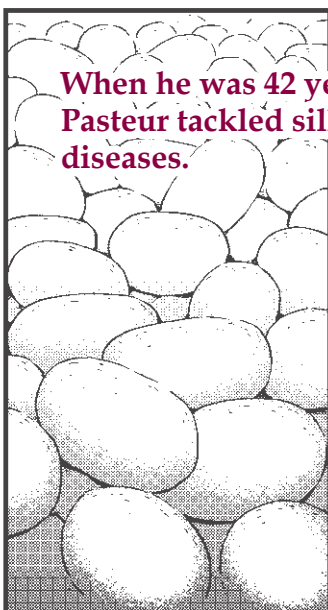


He particularly focused on research about bacteria.

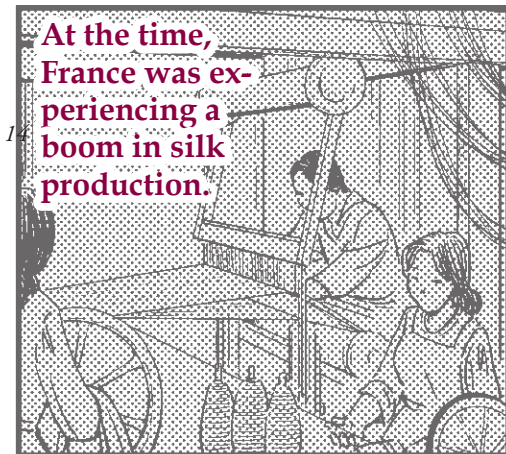
Pasteur made new discoveries one after another after becoming a chemist through diligence and patience.



He discovered a new method of disinfecting milk at a low temperature, which is being used even today.

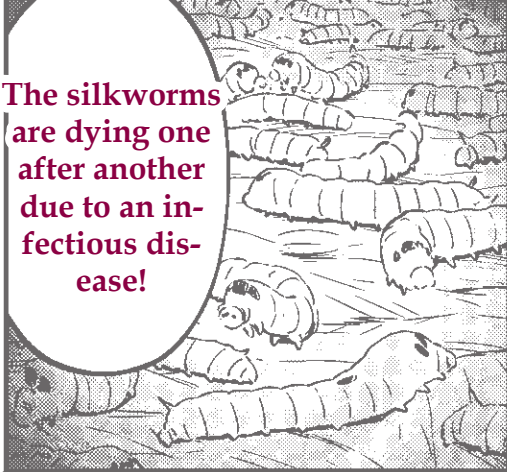


When he was 42 years old, Pasteur tackled silkworm diseases.



At the time,
France was ex-
periencing a
boom in silk
production.

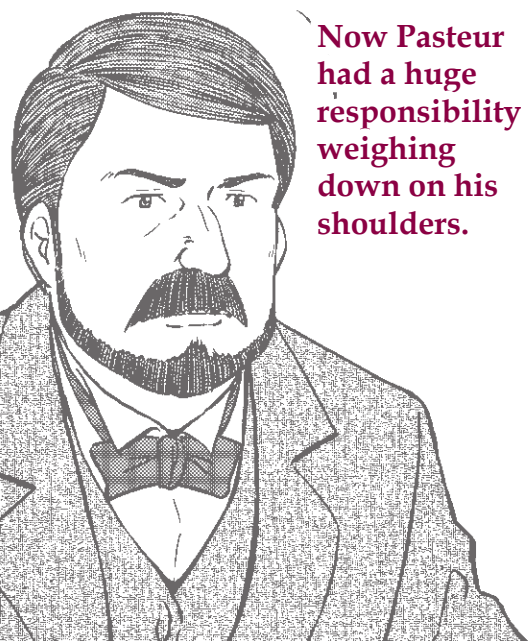
The silkworms
are dying one
after another
due to an in-
fectious dis-
ease!



This is
starting to
hit the
whole
French silk
industry
hard.



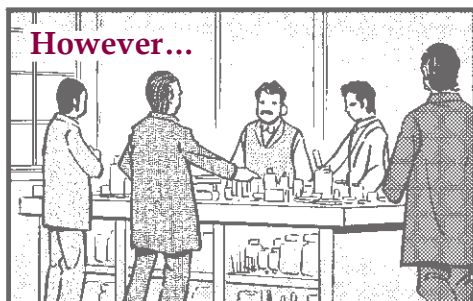
Dr. Pasteur,
we need
your
help!

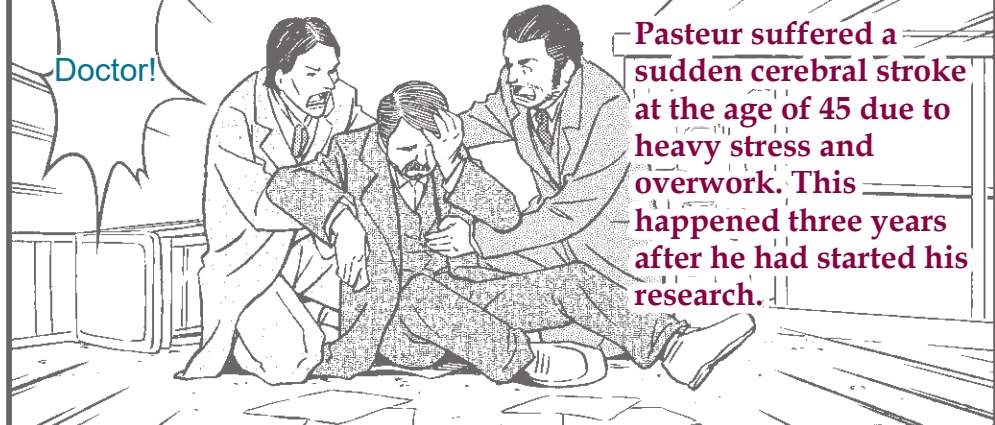


Now Pasteur
had a huge
responsibility
weighing
down on his
shoulders.



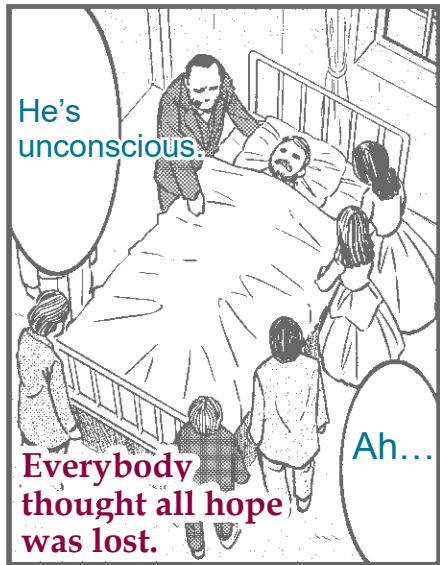
However...





Doctor!

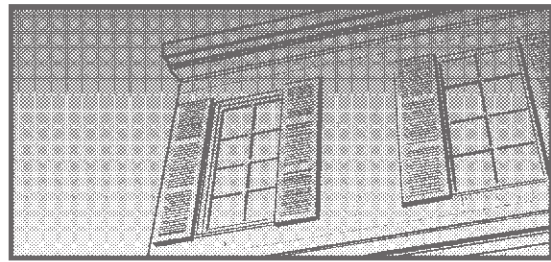
Pasteur suffered a sudden cerebral stroke at the age of 45 due to heavy stress and overwork. This happened three years after he had started his research.



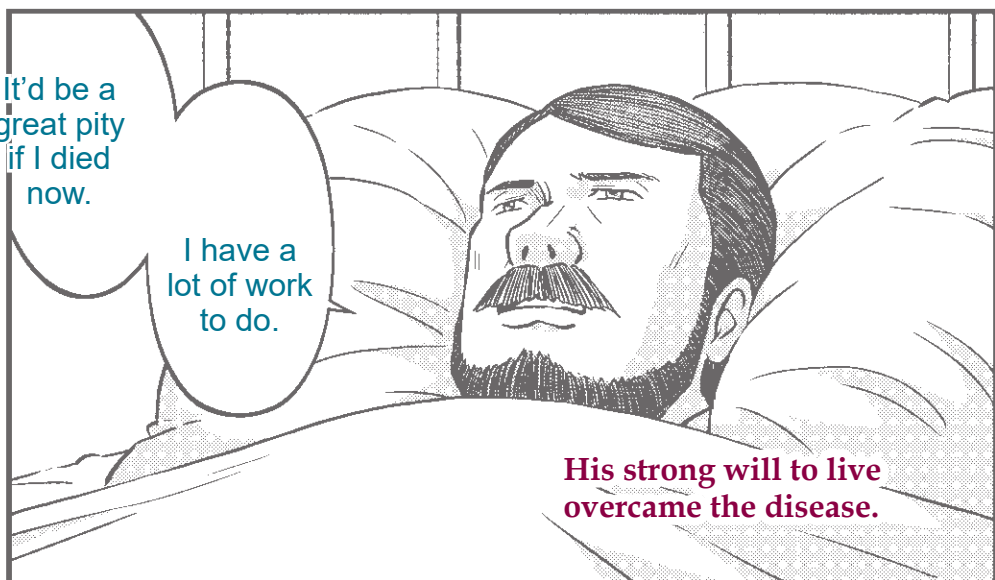
He's unconscious.

Everybody thought all hope was lost.

Ah...



After two days, however, he regained consciousness and murmured:



It'd be a great pity if I died now.

I have a lot of work to do.

His strong will to live overcame the disease.

Fortunately his condition took a change for the better.

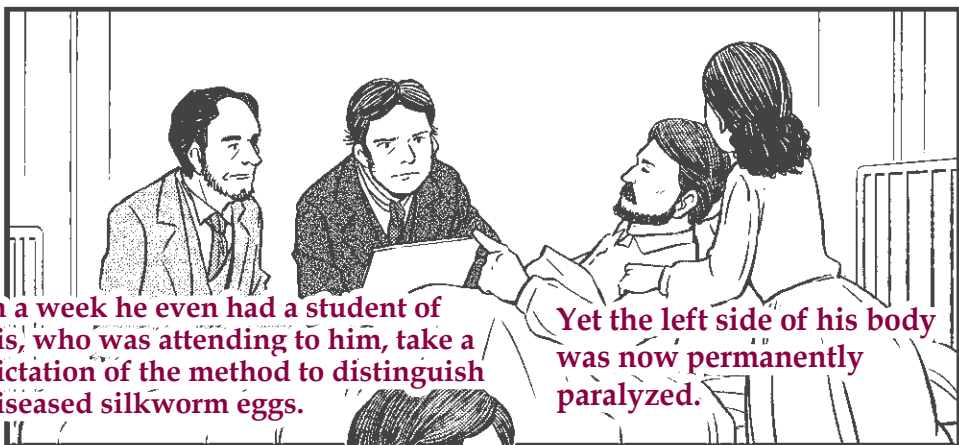


He didn't waste any time in doing research, even while he was in bed.

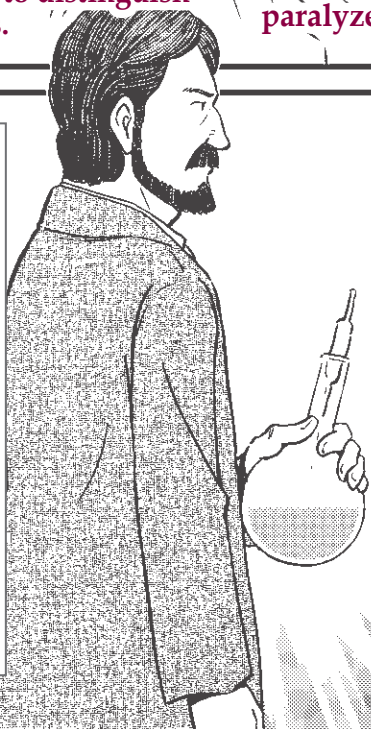


In a week he even had a student of his, who was attending to him, take a dictation of the method to distinguish diseased silkworm eggs.

Yet the left side of his body was now permanently paralyzed.

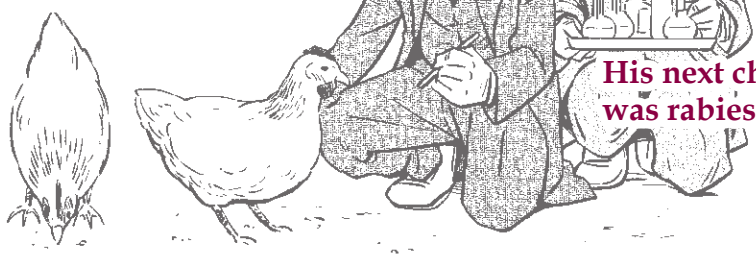


Even so, he continued his research so vigorously that his handicap was hardly even apparent. Finally, he discovered a method of preventing infectious silkworm diseases.

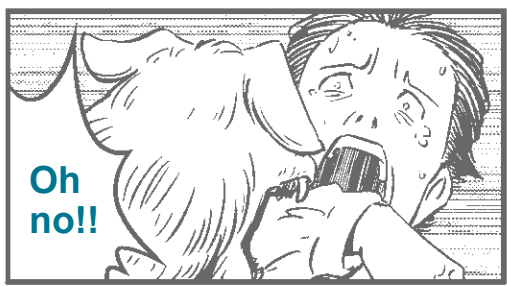
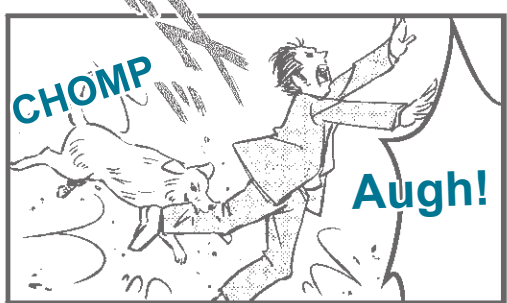
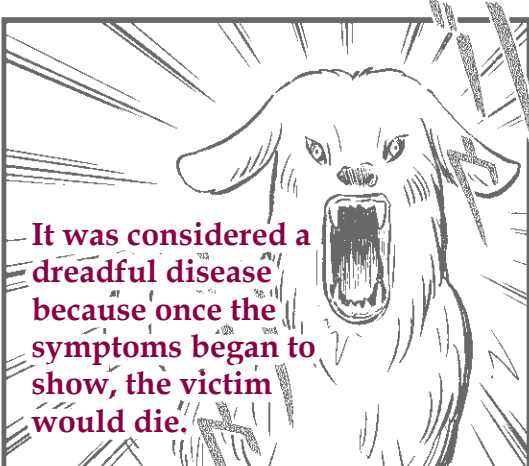


His struggle with the disease had gone on for 5 years. Thanks to his achievement, the prevalence of silkworm diseases plunged dramatically, not only in France but also in all other countries around the world.

His research on diseases in chickens and cows also proved fruitful. Even in his 60's, Pasteur kept launching on new challenges.



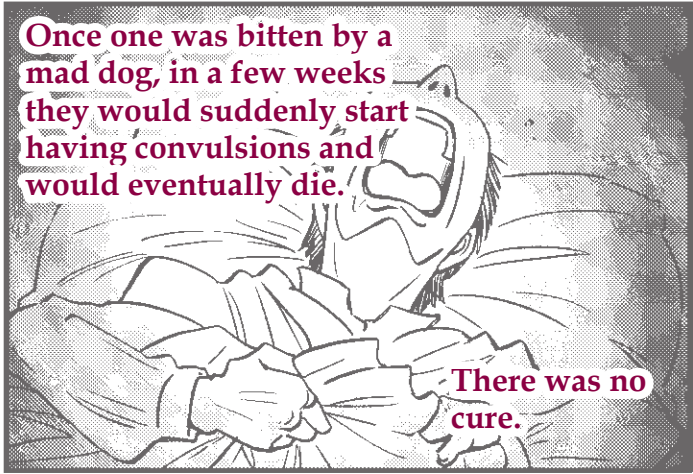
His next challenge was rabies.



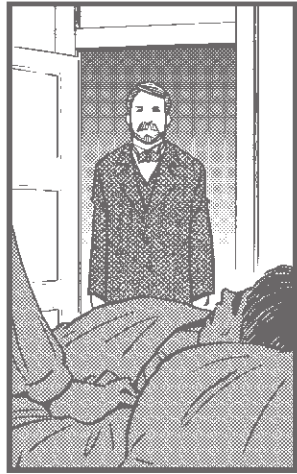
At that time, it was common for rabid dogs and wild animals to attack people. In most cases, the victims were children.



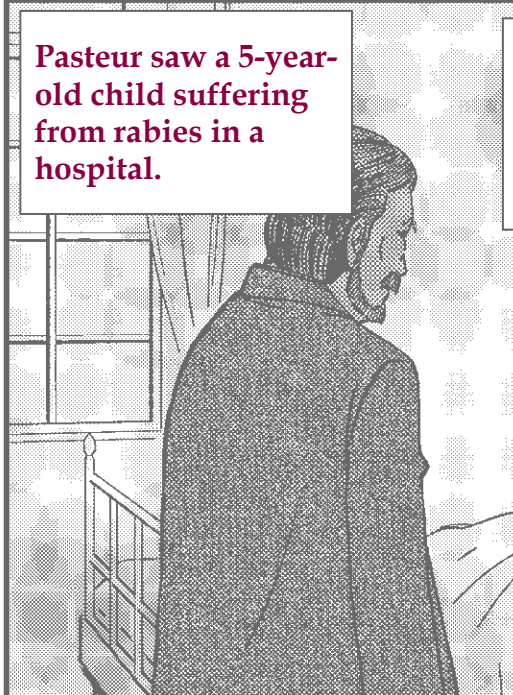
Once one was bitten by a mad dog, in a few weeks they would suddenly start having convulsions and would eventually die.



There was no cure.

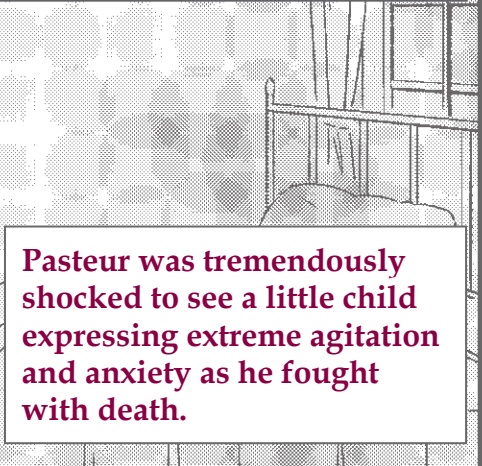


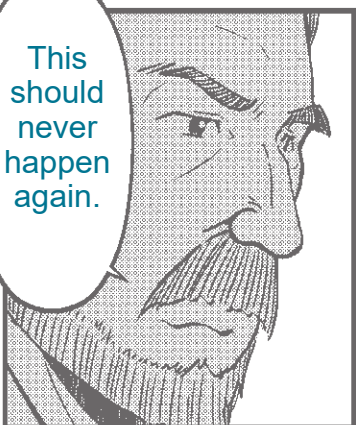
Pasteur saw a 5-year-old child suffering from rabies in a hospital.



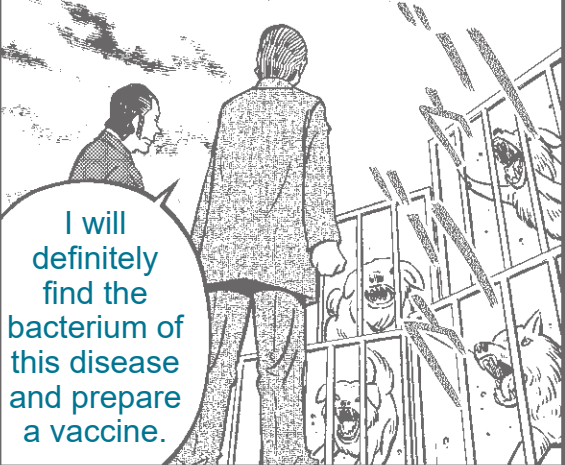
He was having seizures and was constantly saying he was thirsty. Nevertheless, he was unable to drink even a drop of water.

Pasteur was tremendously shocked to see a little child expressing extreme agitation and anxiety as he fought with death.





This should never happen again.

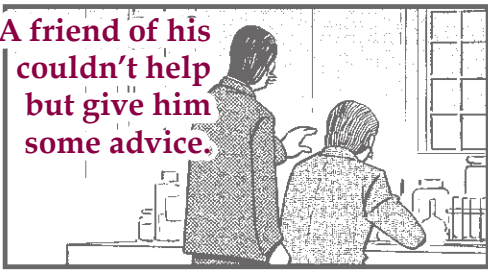


I will definitely find the bacterium of this disease and prepare a vaccine.



Pasteur felt pressed.

But his research failed to yield results. He would stay overnight in his laboratory almost daily.



A friend of his couldn't help but give him some advice.



Think of your condition. Don't push yourself so hard.



You're exceeding your physical limit.

I cannot rest
when I think that
on this day too,
there are
children out
there who
are being tor-
mented by
rabies.

With this,
Pasteur
dedicated
himself to
his studies.

After 5 years, he
managed to create
a vaccine that
cures rabid dogs.

At last,
I have
come
this far!

Injecting
this vaccine
will suppress
rabies in
dogs.

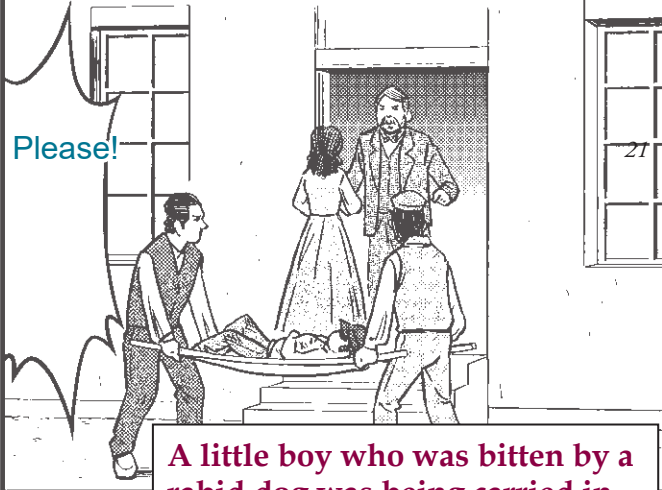
But what
about
human
beings?
I still
don't
know...

And one day----

Bang
Bang

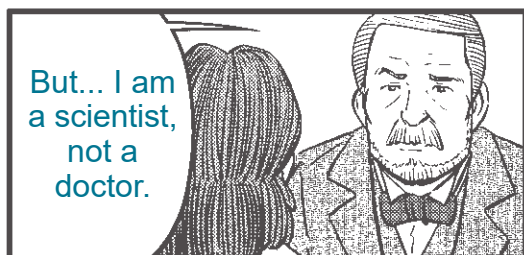


Doctor,
help!

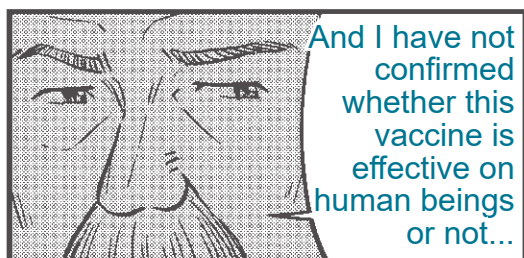


Please!

**A little boy who was bitten by a
rabid dog was being carried in.**



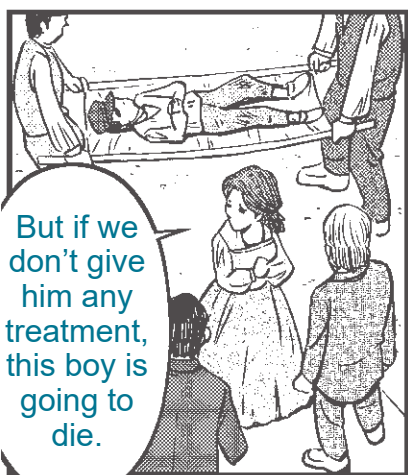
But... I am
a scientist,
not a
doctor.



And I have not
confirmed
whether this
vaccine is
effective on
human beings
or not...



If it
doesn't
work, then
it doesn't
work.



But if we
don't give
him any
treatment,
this boy is
going to
die.

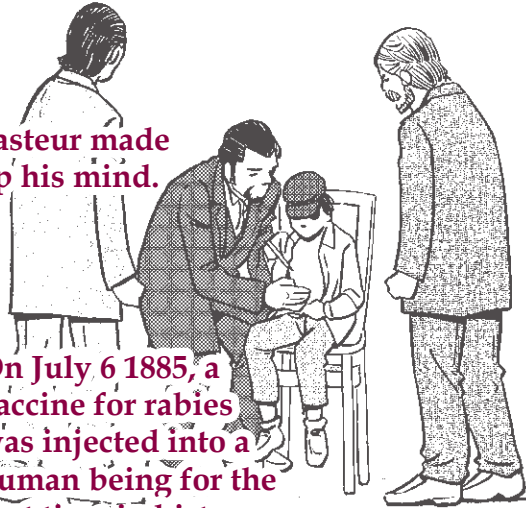


Dr. Pasteur,
you're the only
person on this
earth that we
can rely on!



Pasteur made up his mind.

On July 6 1885, a vaccine for rabies was injected into a human being for the first time in history.



The boy ended up leaving the hospital without having developed any symptoms of the disease.

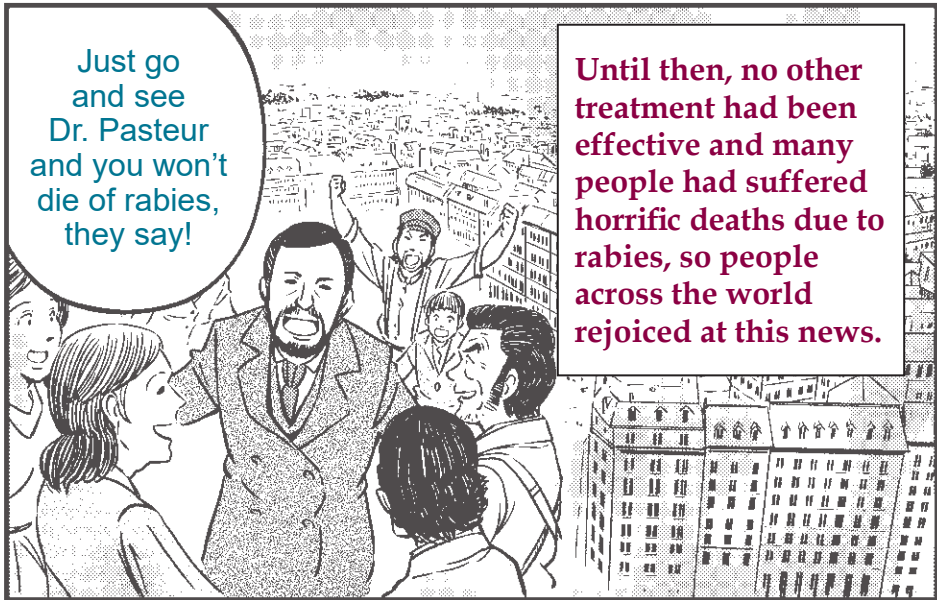


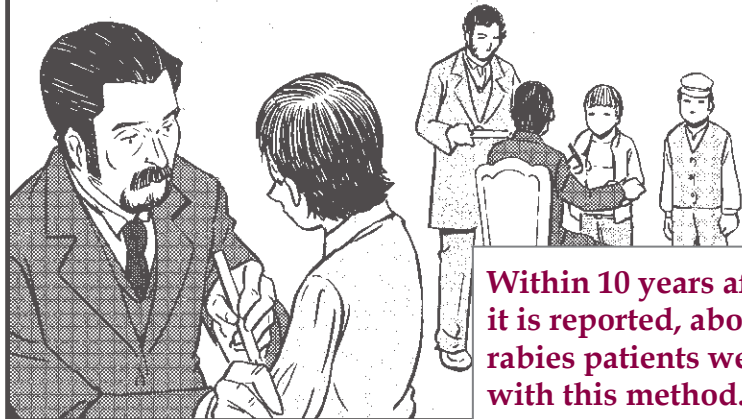
This news of this success spread around the world.



Just go and see Dr. Pasteur and you won't die of rabies, they say!

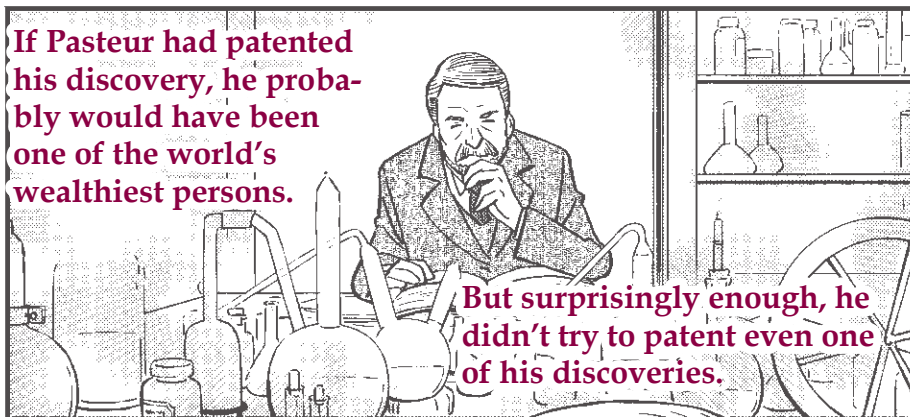
Until then, no other treatment had been effective and many people had suffered horrific deaths due to rabies, so people across the world rejoiced at this news.





Within 10 years after that, it is reported, about 20,000 rabies patients were treated with this method.

If Pasteur had patented his discovery, he probably would have been one of the world's wealthiest persons.

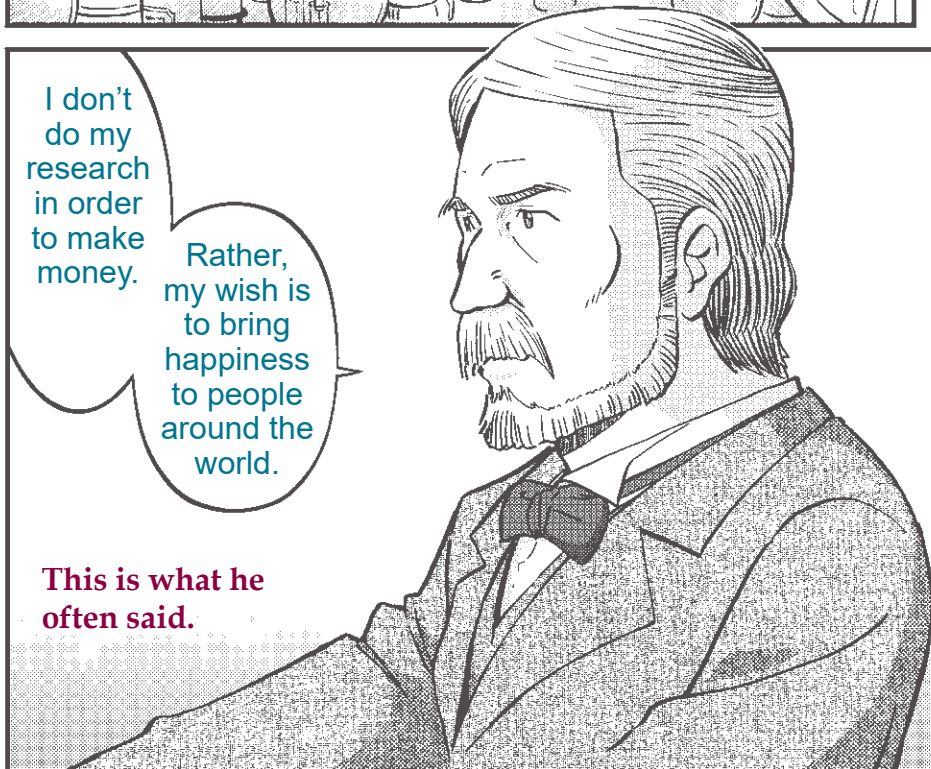


But surprisingly enough, he didn't try to patent even one of his discoveries.

I don't do my research in order to make money.

Rather, my wish is to bring happiness to people around the world.

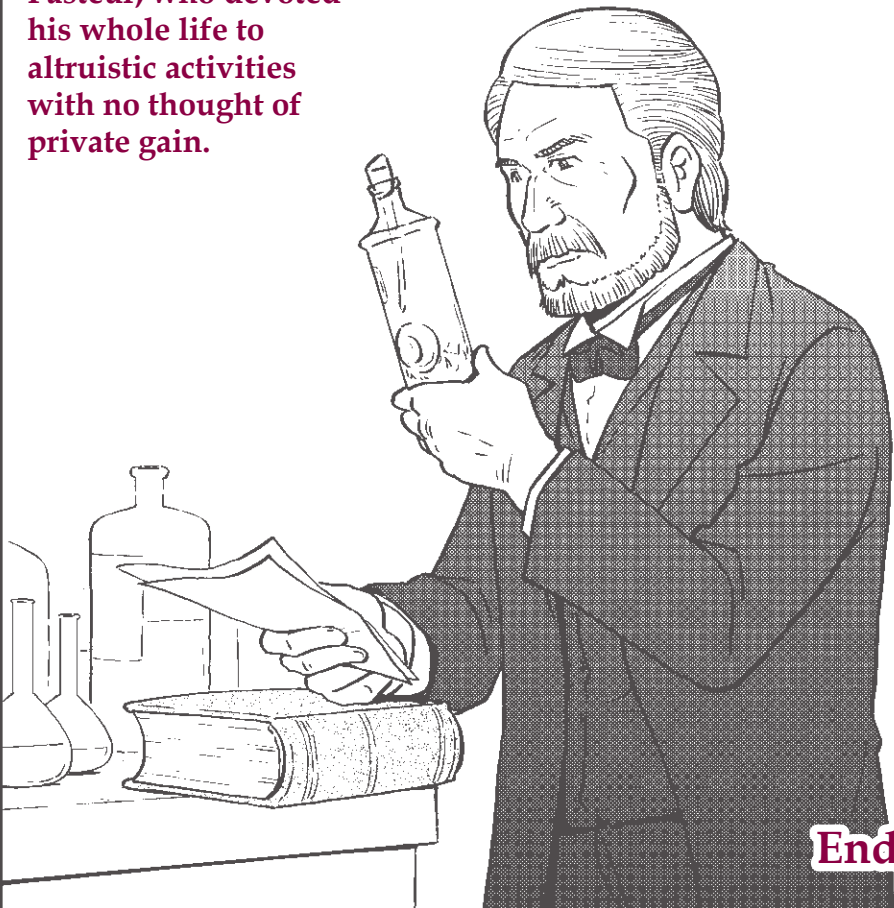
This is what he often said.



Even people from Russia, Brazil, and Turkey offered donations, which added up to a tremendous amount of funds.

As soon as the decision was made to build the Pasteur Institute in Paris, a countrywide fund-raising drive took place.

They were tokens of people's gratitude to Pasteur, who devoted his whole life to altruistic activities with no thought of private gain.



End