

Who Did It First

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Who Did It First

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EAST ENGLISH READERS
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中学生英语读物

WHO DID IT FIRST

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内 容 简 介

本书选自英国出版的英语简易读物，包括九篇文章：《詹纳和天花》、《麻醉剂》、《输血》、《法拉第》、《摄影术》、《电影》、《世界的最高点》、《飞行》和《惠特尔与喷气式发动机》。除了《世界的最高点》一文是讲述攀登珠穆朗玛峰的历史外，其它各篇都分别讲述一项科学技术的发明史，介绍有关的发明家和革新家。他们中许多人的名字都已载入百科全书，为世界人民所纪念。他们的治学态度和攻关精神，跃然纸上。书中还有不少珍闻逸事，引人入胜。

本书可供高中二年级学生和同等程度的读者阅读。

Contents

1. Jenner and Smallpox	1
2. Anaesthetics	14
3. Blood Transfusion	22
4. Michael Faraday	32
5. Photography	42
6. The Cinema	50
7. The Top of the World	60
8. Flying	66
9. Whittle and the Jet Engine	80



JENNER¹ AND SMALLPOX²

There used to be an Old English word, *pocce*³, which meant a bad place on a person's skin. Later this word was written *pock*⁴. And when people saw a lot of these round marks, they called them *pocks* (*pox*)⁵.

Several different illnesses could and can cause marks of this kind to appear on the skin, and one of

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1. Jenner ['dʒenə] 詹纳(1749—1823), 英国医师, 牛痘接种法发明者。他在 1768—1796 年间, 经过观察和研究, 证实患过牛痘的人就不再患天花, 并于 1796 年第一次给人接种牛痘成功。著有《接种牛痘的原因和效果的调查》。 2. smallpox ['smɔ:l'pɒks] n. 天花。 3. pocce [pɒk] n. (古), 痘疱, 痘痕, 麻子。 4. pock [pɒk] n. 痘疱, 痘痕, 麻子。 5. pocks(pox) pock 的复数形式。

the worst, perhaps the worst of all, is called smallpox. The marks themselves are not very serious, but they are signs¹ of a very serious illness indeed. Smallpox was quite common² in the past, and caused millions of deaths. It was worst in Asia and Africa, but it was bad enough in Europe. Two million people died of smallpox³ in Russia in one year. One person easily caught it from another⁴, and when he had caught it the doctors could do very little to help him⁵.

Although smallpox was very serious, it did not always kill the sufferer⁶. It was then noticed that anyone who had had smallpox once never caught it again⁷. So, if a person caught smallpox and did not die, he felt quite safe from it in the future⁸, although the pockmarks usually remained for the rest of his life⁹.

What was the result of this fact? The result was that people wanted to catch smallpox on condition¹⁰ that they did not catch a serious form of it. If they

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1. sign [sain] *n.* 记号, 标记, 迹象。 2. common ['kɒmən] *adj.* 常见的, 普通的。 3. died of smallpox 死于天花。
 4. caught it from another 从别人那里传染上天花。
 5. the doctors could do very little to help him 医生对他简直束手无策。 6. sufferer ['sʌfərə] *n.* 患者。 7. anyone who ... it again 凡是患过天花的人, 就再也不受传染。
 8. he felt quite safe from it in the future 他就感到保险将来不会再出天花了。 9. for the rest of his life 在他的余生中。 10. on condition ... 如果……; 在……条件下。

could have it and live, they would be safe from it for the rest of their lives.

In many different parts of the world, therefore, people began to give themselves smallpox by making a cut in the skin and asking a doctor to put matter from a smallpox mark into the cut¹. This was done by the Chinese, the Hindus² and the North Africans, and probably by others. But it was not done in Europe, so far as we know³, before 1700. When we remember that smallpox usually kills people, this seems a terrible thing to do. But it was the only way that was then known of stopping people from catching the most serious form of smallpox, which would certainly end their lives.⁴

An Englishwoman, Lady Mary Wortley Montagu⁵, went with her husband to Turkey⁶ in 1716. She is well known for the letters which she wrote, at a time in history when letters were better written than they are now.⁷ The high cost of the post⁸, and the diffi-

1. people began ... into the cut 人们开始主动把天花传染给自己,办法是请大夫在皮肤上割个小口,把别人天花痘疤中的脓放进切口。matter *n.* (医)脓。 2. Hindu ['hin'du:] *n.* 印度人。 3. so far as we know 就我们所知。 4. But it ... their lives. 但是这是当时所知道的唯一办法,来防止人们传染上肯定会要使他们丧命的那类恶性天花。 5. Lady Mary Wortley Montagu ['wɜ:tli 'mɒntəgju:] 玛丽·沃特利·蒙塔古夫人。lady ['leidi] *n.* 夫人,女士,小姐。 6. Turkey ['tɜ:ki] *n.* 土耳其(亚洲)。 7. She is ... are now. 她以她所写的书信而闻名于世,历史上有个时期,书信比现在写得更好。 8. the high cost of post 昂贵的邮费。post [pəʊst] *n.* 邮寄

culties of sending letters on long journeys across the world, made people take a lot of care when they wrote to their friends in those days. Lady Mary was a beautiful and important woman, and she could write well. Her letters are still read with pleasure today.

While she was in Constantinople¹ (Istanbul) she wrote a letter about smallpox. In this letter she said that no one in Turkey was much afraid of smallpox because the people there had found a way of lessening its effects². They held parties, at which fifteen or sixteen people were present, and a woman arrived with some 'matter of the best sort of smallpox'³. This woman used to cut the skin of anyone who asked her to do so, and put a very little of the matter into the cut. Thus the person was given smallpox, but only the 'best sort'. It was a strange kind of party.

'The best sort of smallpox' was probably a kind that was not very serious, and it seems that no one died as a result of the woman's work. The people who were treated in this way could not catch smallpox later. They were safe.

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1. Constantinople [ˌkɒnstəntɪˈnəʊpl] 君士坦丁堡 (今名 Istanbul [ɪstænˈbuːl] 伊斯坦布尔, 土耳其港市)。 2. the people ... its effects 那里的人们找到了一种减轻其后果的方法。 lessen ['lesn] vt. 减轻, 减小, 减少。 effect [ɪˈfekt] n. 后果, 影响, 作用。 3. matter of the best sort of smallpox 从不怎么严重的天花痘疤中取出的脓。

Lady Mary was not content with describing what she saw.¹ A year later, although it was not safe, she tried the experiment on her own small son. He was given smallpox and he did not die.

Because Lady Mary was an important person in England, her report had a great effect. Quite a large number of people did as she had described, but not everyone agreed that² it was the right thing to do. It was considered wrong by many, and in France, where the French had also begun to do it, it was decided that it ought to be stopped. It certainly helped the person who was given the 'best sort of smallpox' through a cut in the skin; but other people in France caught smallpox from the person who had been treated, and a greater number of people died than before³. In England, too, it was noticed that the number of deaths from smallpox increased. In 1802 it was reported that eighty-nine persons in every thousand died of smallpox, instead of seventy-two in every thousand before⁴.

This was clearly not a good way to deal with the

1. Lady Mary ... she saw. 玛丽夫人并不满足于把她所见到的情况写出来。content [kən'tent] *adj.* 满足的, 满意的。describe [dis'kraib] *vt.* 描写, 描绘, 叙述。 2. not everyone agreed that ... 并不是人人都同意。 3. but other ... than before 但是在法国, 别人却从那个已经接种过天花的人那里传染上了天花, 而且比过去死的人更多。 4. it was reported ... in every thousand before 据报道, 每千人中有 89 人死于天花, 而过去是每千人中 72 人。

terrible sickness¹. More people were dying; more people had pock-marks on their faces. But today we do not often see anyone with these marks on the face. Why has smallpox almost disappeared from the world?

There is another illness which causes round marks on the skin, usually on the hands. It is called cowpox² because it is caught from cows. This is not a serious illness, and no one is afraid of it. Indeed, most of us have had cowpox. This is one result of the work of Edward Jenner, who was born in Berkeley³, England, in 1749. Like many other boys of the time, he was given smallpox so that he could not catch it in later life.

Edward loved the country⁴, and especially⁵ birds and wild animals. His father died when he was quite young; but other people took care of him, and after going to school for some years, Edward decided to become a doctor. He went to study under Doctor Ludlow⁶ near Bristol⁷, and later in London under the great Doctor Hunter⁸.

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1. to deal with the terrible sickness 对付这种可怕的疾病。
deal [di:l] *vi.* 对付, 应付. sickness ['sɪknɪs] *n.* 疾病。
2. cowpox ['kau'pɒks] *n.* 牛痘。 3. Berkeley ['bɑ:kli, 'be:kli] 伯克利(地名)。 4. Edward loved the country 爱德华喜爱农村。 Edward ['edwəd] 爱德华(人名)。 5. especially [is'peʃəli] *adv.* 特别, 尤其, 格外。 6. study under Doctor Ludlow ['lʌdləu] 在勒德洛博士门下学习。 7. Bristol ['brɪstl] 布里斯托尔(英国西南部一城市)。 8. Hunter ['hʌntə] 亨特(1728—1793), 英国医生, 解剖学家。

Today anyone who wishes to become a doctor must go to college and work hard there for many years, perhaps six, seven, or eight. But this was not done in Jenner's lifetime. In those days a young man who wanted to be a doctor had first to find a doctor who was willing¹ to accept a student. The young man then worked with him, visited the sick with him, and learnt what to do by watching and helping.

Before Jenner went to London, while he was still working with Doctor Ludlow (1768), a young country-woman came to ask for advice, and the subject of smallpox was mentioned². The girl said at once that she could not catch smallpox because she had already had cowpox.

In the history of the fight against smallpox it is difficult to imagine anything more important than this, if it was true.³ But was it true? People who lived in the country in those days had stranger ideas about illness than the people who live there now. They knew almost nothing about the fight against sickness. The doctors of that time well understood that people of that sort often talked a lot of nonsense. But Jenner noticed what the girl said and never forgot it. Even clever men can learn

1. willing ['wiliŋ] *adj.* 愿意的, 心甘情愿的, 乐意的。

2. mention ['menʃən] *n.* 提及, 说起。

3. In the history ..., if it was true. 在和天花作斗争的历史中, 很难想象有什么比这姑娘提供的情况 (如果属实的话) 更重要的了。

things from people who appear to know nothing.¹

Jenner started to think. Cowpox was not a serious illness, and no one feared it. He wondered if it would be a good thing to give cowpox to someone and then try to find out if the same person could catch smallpox.

After Jenner left London he went back to Berkeley to work as a doctor. Remembering what the girl had said, he asked the country people a number of questions, and found that many of the men and women who lived near cows believed the girl's words to be true. No one who had had cowpox seemed ever to catch smallpox.²

Part of Jenner's work at this time, like part of the work of most doctors, was to give 'the best sort of smallpox' to those who wanted it. He noticed that it had little or no effect on those who had had cowpox. He became more and more sure that he had found a way of saving thousands of lives. The right thing to do was to give everyone cowpox.

He told other doctors, but they would not agree with him. They had no respect for the ideas of country people. And when Jenner went to London and told the London doctors about it, he found that they had little respect for unknown men³ who worked in the country

1. Even clever ... to know nothing. 即使聪明人也可以从看来无知的人那里学到东西。 2. No one ... to catch smallpox. 出过牛痘的人中好象从来没有人传染过天花。 3. they had ... unknown men 他们不那么尊重无名的人。 unknown ['ʌn'nəʊn] *adj.* 无名的。

far away from the heart of the nation.

We must remember, of course, that Jenner had only an idea. He had never tried it on anyone; he could show no results.¹ Once, long before, the great Doctor Hunter (who was dead by this time) had said to Jenner about another matter, "Why think? Why not try?"² They were wise words, which all of us could remember with advantage.³ Jenner remembered them, and he wanted to follow his old teacher's advice⁴. But was it safe? No doctor likes to play with men's lives⁵.

Many years passed before he found out the truth. In 1796 he met a young woman who had cowpox. He took some of the bad matter from one of the pockmarks on her hands, cut the skin on the arm of a boy named Phipps⁶, and put the bad matter into the cut. He gave cowpox to the boy Phipps.

Jenner studied the cowpox marks. They were so like the marks of smallpox that he was quite surprised. "But listen to the most delightful⁷ part of my story," Jenner wrote to a friend in a letter dated July 19th⁸, 1796.

1. He had ... no results. 他从来没有在任何人身上试验过; 他拿不出结果来。 2. Why think? Why not try? 为什么想? 为什么不试一试? 3. They were ... with advantage. 这是智慧之言, 我们大家把它记住, 可以得益不浅。 4. to follow his old teacher's advice 听从他先师的箴言。 5. to play with men's lives 拿人命开玩笑。 6. Phipps ['fips] 菲普斯 (人名)。 7. delightful [di'laɪtful] *adj.* (事物) 令人高兴的, 使人快乐的, (人) 讨人喜欢的, 可爱的。 8. in a letter dated July 19th 在 7 月 19 日写的一封信中。 *date vt.* 注(明)……的日期。

The delightful part was this: as he had given the boy cowpox, he now gave him smallpox by cutting the skin as before. But the smallpox had no effect on the boy at all. His health did not suffer¹; he never caught smallpox.

We are not surprised that Jenner was delighted. He told his fellow-doctors² that the terrible enemy, smallpox, was now beaten. But people were still unwilling³ to listen to him; they did not believe him, and they became very tired of his story⁴. He was also told that he ought to be very careful when he said things of this kind. He was now a respected man; but his friends said that if he continued to talk like this about smallpox, he would lose the respect of the world.

Some strange ideas flew around England. One great man of the time believed that everyone who had been given cowpox would easily catch all the other illnesses from which cows suffer.⁵ Another said that he had noticed the face of a boy who had been treated as Jenner advised⁶; the boy's face had begun to look like

1. suffer ['sʌfə] *vt.* 遭受, 蒙受。 *vi.* 受痛苦, 患病。

2. fellow-doctors 医学同行。 3. unwilling ['ʌn'wɪlɪŋ] *adj.* 不愿意的。

4. became very tired of his story 对他的故事都听腻了。

5. One great man ... cows suffer. 当时有一位大人物认为, 凡是种过牛痘的人很容易传染上牛所患的所有其它的疾病。

6. advise [əd'vaɪz] *vt.* 劝告, 向……提意见, 建议。

a cow's face. We are not told whether or not the boy had looked like a cow ever since he was born.

Most of the people, then, would not listen to Jenner. But Jenner would not listen to them when they told him to stop talking. He wrote a book and told the world all about his idea (1798).

The Latin¹ word for a cow is *vacca*²; and because Jenner was using matter from a cow's skin, he called his work *vaccination*³. When he put the matter into a person's arm, he *vaccinated*⁴ the person. He offered⁵ to vaccinate anyone who came to him, but few came; they were afraid, or they did not believe.

But the facts could be understood by anyone who studied them. It was soon quite clear that people who had been vaccinated did not catch smallpox, and people were so afraid of it then that they were ready to do almost anything to make themselves safe.⁶ At last a doctor in London followed Jenner's advice and started to vaccinate people. Others followed him. The idea reached other countries. The King of Spain⁷

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1. Latin ['lætin] *adj.* 拉丁语的; *n.* 拉丁语。 2. *vacca* 奶牛 (拉丁语)。 3. *vaccination* [ˌvæksi'neɪʃən] *n.* 种痘, 接种。
4. *vaccinate* [ˌvæksineɪt] *vt.* 给……种牛痘(疫苗)。 *vi.* 施种牛痘(疫苗)。 5. *offer* ['ɒfə] *vt.* 提出; 建议。 6. *It was ... themselves safe.* 种过牛痘的人就不出天花, 这个事实不久就看得很清楚了。当时人们非常害怕出天花, 他们只要能保平安无恙, 几乎不管要他们干什么, 都是乐意的。 7. *Spain* [speɪn] *n.* 西班牙(国名)。

believed in it. President¹ Jefferson² of America was himself vaccinated. Soon Jenner's name was known in many parts of the world. He received presents for his work: one of them was a ring from Russia.

Germany was one of the first countries to give Jenner honour³; and the doctors of England (who had disbelieved him before) gave him some silver⁴. England herself, remembering that Jenner had made no money out of his great work, gave him first £10,000 and then later another £20,000.⁵ But Jenner never became proud. He continued his work, chiefly⁶ in the country near his home, until he died at the age of seventy-four.

His name will always be remembered because he showed us how to win the fight against smallpox. But his work also showed other doctors how to fight other illnesses. It was the beginning of new hopes of better health. Today we often go to a doctor and ask him to put something into one of our arms, so that we may be safe from one illness or another. This kind of work all started with Jenner's vaccination.⁷

1. president ['prezɪdənt] *n.* 总统, 议长, 会长, 校长。

2. Jefferson ['dʒefəsn] 杰斐逊 (1743—1826), 美国政治家, 于 1801—1809 年任美国第三任总统。 3. honour ['ɒnə] *n.* 荣誉, 光荣。

4. silver ['sɪlvə] *n.* 银; 银币。 5. England herself, ... another £20,000. 英国想到詹纳从来没有从他的伟大事业中赚过钱, 起初给了他 10,000 英镑, 后来又给了 20,000 英镑。

6. chiefly ['tʃiːfli] *adv.* 主要地。 7. This kind ... Jenner's vaccination. 这类工作都是由詹纳的牛痘接种开始的。