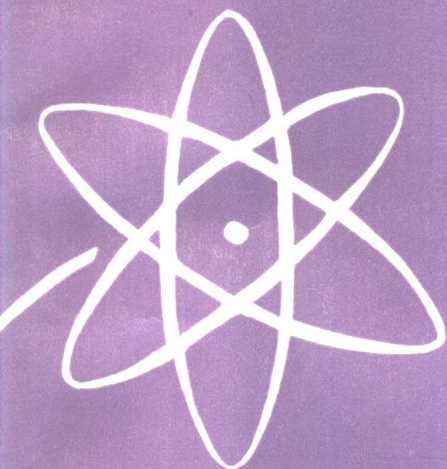


日用英语与科技英语



**BEGINNING
SCIENTIFIC
ENGLISH**

对外贸易出版社

日用英语与科技英语

胡 衡 林金辉 编 译
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前 言

随着我国科学技术、文化教育的迅速发展，越来越多的人希望能直接阅读英语原版科技书籍。不少人通过学习普通英语课本掌握了一定数量的词汇和基础语法知识，并能阅读一般性英语读物，但阅读科技文章仍有不少困难。这是由于科技英语与日用英语有所不同。科技英语无论在用词、表达方式或语言结构等方面都有自己的特点。

为了帮助读者较快地掌握运用科技英语，我们编译了这本《日用英语与科技英语》。本书编译自七十年代中期英国出版的“Beginning Scientific English”。全书共40篇，内容主要是物理、化学、生物等方面的基础科学知识。本书最大特点是每篇设A、B两种课文，课文含义一样，但表达方式不同。课文A是用日用英语写的，课文B是用科技英语写的，通俗易懂，生动活泼。在A、B两课文后列出两种文体的不同表达对比，以帮助读者观察掌握科技英语的习惯表达方法。为帮助读者较好地理解课文，对每篇课文A和B按顺序作了比较详尽的注译，并将课文B译成中文，供读者参考。书末附有不同表达对比汇编及总词汇表。当然，应该说这里汇编的不同表达对比只是大体的划分，对于某些单词或词组来说，如 able, and so on, 很难说只限于一种表达方式。

本书对大学生、高中生、科技工作者及自学英语者都适用。

参加本书编注和翻译的有胡衡、林金辉、卢兆俊、胡永久同志，并由华中师范学院外语系系主任周叔平教授审阅。

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1 Ancient Rope-making

A

Making ropes¹ is one of the oldest trades in the world. We know that people made ropes more than 5,000 years ago², because we have found pieces of rope in very old Egyptian tombs. They made some of these from the hair of camels. They made others from twisted grass³. People used them for tying animals, for getting water from deep wells and for pulling large stones⁴ which they used in building. We have found too, ropes which were made of⁵ thin copper wire in the city of Pompeii, which a volcano destroyed a little less than 2,000 years ago.

In the very old days, people made rope by hand, but today, machines make it. In very poor countries today, people still make rope as⁶ they made it in the very old days.

B

Rope-making⁷ is one of the oldest trades in the world. It is known that⁸ rope was made over 5,000 years ago, because pieces of rope have been discovered in ancient Egyptian tombs. Some of these were made from⁹ camel-hair¹⁰, and others were made from twisted grass. They were used

for tying animals, for obtaining water from deep wells and for pulling large stones used in building¹¹. Also, ropes made of thin copper wire have been discovered in the city of Pompeii, which was destroyed by a volcano a little under 2,000 years ago.

In ancient times, rope was made by hand; nowadays, however, it is made by machine. In under-developed countries¹² today, rope is still made as it was¹³ in ancient times.

不同表达对比

A	B
1. making ropes	1. rope-making
2. more than	2. over
3. found	3. discovered
4. very old	4. ancient
5. the hair of camels	5. camel-hair
6. getting	6. obtaining
7. which they used in building	7. used in building
8. too	8. also
9. which were made of	9. made of
10. less than	10. under
11. the very old days	11. ancient times
12. but today	12. nowadays, however
13. very poor countries	13. under-developed countries

14. . . ., people still
make rope as they
made it . . .

14. . . ., rope is still
made as it was . . .

注 释

1. making ropes 制绳。这是动名词短语，作主语。
2. more than 5,000 years ago 五千多年前。more than 比…多；超过。
3. twisted grass 搓捻了的草。twisted 是过去分词，作定语。
4. People . . . stones. 本句中 tying animals, getting water 和 pulling large stones 都是动名词短语，作介词 for 的宾语。这些介词短语在句中作目的状语。
5. be made of 由…做成。
6. as 引导行为方式状语从句，意思是“如同…一样”。
7. rope-making 是合成名词，由名词 + 动名词构成。两者之间是动宾关系。又如：paper-making 造纸；machine-building 机械制造。
8. it is known that . . . 众所周知。it 作形式主语，that 引导主语从句。
9. be made from 用…制成。凡制成品中看不出原材料时用 be made from, 如 Paper is made from rags. 纸用破布制成。如果制成品中原材料仍看得出，则用 be made of, 如 The bridge is made of stone. 桥是石头砌的。

10. camel-hair (=hair of camel) 驼毛。这是合成名词，由名词+名词构成，前面的名词起定语作用，相当于一个介词短语。又如 well-water = water from wells 井水。
11. used in building 是过去分词短语，作定语，修饰 stones。它是由定语从句 which were used in building (见课文 A) 简化而来。
12. under-developed countries 不发达国家。
13. as it was = as it was made 从句中 made 与主句中相同，为了避免重复而省略。

1. 古代制绳

制绳是世界上最古老的手工业之一。人们知道，早在五千多年前就有了绳子，因为在埃及古墓中发现过几段绳子。其中有的是用驼毛搓成的，有的是用草捻成的。人们用绳子捆绑野兽、从深井提水，以及拉运建筑用的大块石头。在庞培城中还发现过一种用细铜丝制成的绳子。庞培城是在将近两千年前的一次火山爆发中被毁灭的。

古时候，绳是手工做的。如今，制绳用机器了。可是，在一些不发达国家里，却仍然使用古老的方法制绳。

2 Natural and Synthetic Rubber

A

People get natural rubber from rubber trees as a white, milky liquid, which is called latex¹. They mix it with acid, and dry it, and then they send it to countries all over the world. As the rubber industry grew, people needed more and more rubber. They started rubber plantations in countries with hot, wet weather conditions, but these still could not give enough raw rubber to meet the needs of² growing industry.

It was not satisfactory for industry to depend on supplies which come from so far away from the industrial areas of Europe³. It was always possible that⁴ wars or shipping trouble could stop supplies.

For many years people tried to make something to take its place⁵, but they could not do it. In the end, they found a way of making artificial, man-made rubber which is in many ways better than and in some ways not as good as natural rubber⁶. They make artificial, man-made⁷ rubber in factories by a complicated chemical process. It is usually cheaper than natural rubber.

Today, the world needs so much rubber that we use both natural and artificial rubber in large amounts⁸.

B

Natural rubber is obtained⁹ from rubber trees as a white, milky liquid known as¹⁰ latex. This is treated with acid and dried, before being despatched¹¹ to countries all over the world. As the rubber industry developed, more and more rubber was required. Rubber plantations were established in countries with a hot, humid climate, but these still could not supply sufficient raw rubber to satisfy the requirements of developing industry.

It was unsatisfactory for industry to depend on supplies coming from so far away from the industrial areas of Europe. It was always possible that supplies could be stopped by wars or shipping trouble.

For many years, attempts were made to produce a substitute, but they were unsuccessful. Finally, a method was discovered of producing synthetic rubber which is in many ways superior and in some ways inferior to natural rubber. Synthetic rubber is produced in factories by a complicated chemical process. It is usually cheaper than natural rubber.

At present¹², the world requirements for rubber are so great that both natural and synthetic rubber are used in large quantities¹³.

不同表达对比

A	B
1. get	1. is obtained
2. which is called	2. known as
3. mix it with	3. treated with
4. and then they send it	4. before being despatched
5. grew	5. developed
6. needed	6. required
7. started	7. established
8. wet weather conditions	8. humid climate
9. give enough	9. supply sufficient
10. to meet the needs	10. to satisfy the requirements
11. not satisfactory	11. unsatisfactory
12. which come	12. coming
13. people tried	13. attempts were made
14. to make	14. to produce
15. something to take its place	15. a substitute
16. could not do it	16. were unsuccessful
17. in the end	17. finally
18. found a way	18. a method was discovered

- 19. artificial, man made
- 20. better
- 21. not as good as
- 22. today, the world
needs so much rub-
ber
- 23. amounts

- 19. synthetic
- 20. superior
- 21. inferior to
- 22. at present, the world
requirements for rub-
ber are so great
- 23. quantities

注 释

1. which is called latex 这是非限定性定语从句，修饰 liquid。be called 叫做，称为。
2. to meet the needs of 为了满足…的需要。这是不定式短语作目的状语。
3. It was ... Europe. 主句中 it 是形式主语，真正主语是不定式短语 to depend on (依赖，依靠) supplies。而 for industry 是不定式的逻辑主语。其句型是：It is ... for sb. to do sth. 如 It is necessary for us to learn foreign languages. 我们学习外语很有必要。which 引导的定语从句修饰 supplies。从句中 far away from 意为“远离…的地方”。
4. It was possible that ... 有可能…。it 是形式主语，that 引导主语从句。其句型是：It is (was) + 形容词 + that 从句。如 It is very important that ... 非常重要是…。
5. to take its place 代替它。这是不定式短语，作目的状语。take one's place 代替，代理。

6. In the end . . . rubber. 本句中 they found a way 是主句。which 引导的定语从句修饰 man-made rubber, 该定语从句又包含有两个比较结构, 即: better than 比…好和 not as good as 不如…。
7. man-made 人造的。这是合成形容词, 由名词 + 过去分词构成。过去分词表示被动, 名词表示行为主体。man-made rubber = rubber made by man 人造橡胶。又如: hand-twisted rope = rope twisted by hand 手工搓的绳。machine-made rope = rope made by machine 机器制的绳。
8. in large amounts 大量地。
9. is obtained 是被动语态。在课文 B 中大量使用各种时态的被动形式, 如 is treated . . . and dried; were established; could be stopped; were made; was discovered; is produced; are used 等。
10. known as 叫做。这是过去分词短语作定语, 修饰 liquid。
11. being despatched 是动名词的被动形式。当动名词逻辑上的主语是这动作的对象时, 该动名词一般要用被动形式。本句中动名词的逻辑主语是 this (指 natural rubber), 它是 despatch 的对象。
12. at present 目前。
13. in large quantities = in large amounts.

2. 天然橡胶和合成橡胶

天然橡胶取自橡胶树, 它是一种叫做“胶乳”的白色乳状液体。橡胶在被运往世界各国之前, 要经过酸处理和烘

干。随着橡胶工业的发展，橡胶的需要量越来越大。一些气候炎热湿润的国家相继兴办橡胶种植园。然而，生橡胶仍不能充分满足工业发展的需要。

依靠远离欧洲工业区的地方供应橡胶是难以满足工业需要的。供应还往往可能由于战争或海运困难而中断。

多年来人们试图制造某种橡胶代用品，但未获成功。最后终于找到了一种制造合成橡胶的方法。合成橡胶在许多方面优于天然橡胶，而在某些方面又不如天然橡胶。合成橡胶是在工厂里经过复杂的化学过程生产出来的，其价格通常比天然橡胶便宜。

目前，世界上对橡胶的需求量很大，因此天然橡胶和合成橡胶两者都被大量使用。