

【指南针】翻译原文

中国是世界上公认发明指南针的国家。早在 2400 多年前，中国人就创造出世界上最早的指南针。后来经过不断改进，到宋朝(the Song Dynasty)人们制造出铁针指南针并应用于航海。中国是第一个在海船上使用指南针的国家。指南针为明代(the Ming Dynasty)郑和下西洋提供了条件。后来指南针传入欧洲，推动了欧洲航海事业的发展为，哥伦布(Columbus)的航行提供了技术保证。

【参考翻译】

China is universally recognized as the country having invented the compass. As early as 2,400 years ago, Chinese people created the earliest compass in the world. Later it was further improved continuously. During the Song Dynasty, people produced the compass with iron needles and applied it in navigation. China is the first country to use the compass on seagoing ships. The compass provided aid for Zheng He's voyages to the Western Ocean in the Ming Dynasty. Later the compass spread into Europe, promoting the development of the European marine industry and guaranteeing technical support for Columbus' navigation.

【火药】翻译原文

火药(gunpowder)是最早出现的化学炸药和推进剂(propellant)。在火药发明之前，人们使用过许多燃烧弹(incendiary bomb)和燃烧设备。人们通常把火药的发明归因于中国的炼金术(alchemy)。众所周知，火药被列为中国的“四大发明”之一。这项发明可能早在唐朝就已经研制出来了。由于 13 世纪蒙古人的征战，有关火药的知识被传到全世界。最晚从 14 世纪开始，火药就已经开始被应用于战争中并产生了一定的影响。

【参考译文】

Gunpowder was the first chemical explosive and propellant. Prior to the invention of gunpowder, many incendiary bombs and burning devices had been used. The invention of gunpowder is usually attributed to Chinese alchemy. It is known to all that gunpowder is listed as one of the “Four Great Inventions” of China. The invention was made perhaps as early as in the Tang Dynasty. Knowledge of gunpowder was spread throughout the world as a result of the Mongol conquests in the 13th century. It was employed in warfare to some effect from at least the 14th century.

【造纸术】翻译原文

在古代，著作和铭文(inscription)通常写在竹片或丝绸上。但丝绸昂贵，竹片太重，使用起来都不方便。后来蔡伦开创了用树皮造纸的方法。传统上人们认为他是纸张和造纸术的发明者。尽管公元前 2 世纪中国就已经有了早期的纸，但蔡伦促成了纸张的首次重大改进，并通过添加至关重要的新材料使造纸过程标准化。蔡伦发现了造纸材料的组合方式，发明了造纸术。这项发明使蔡伦闻名于世，甚至使他在有生之年就已经得到了认可。

【参考译文】

In ancient times, writing works and inscriptions were generally written on: tablets of bamboo or on pieces of silk. But silk being costly and bamboo heavy, they were both not convenient to use. Then Cai Lun initiated the method of making paper with the bark of trees. Traditionally, he is regarded as the inventor of paper and the technique of papermaking. Although early forms of paper had already existed in China since the 2nd century BC, he fostered the first significant improvement and standardization of papermaking by adding essential new materials into papers composition. Cai found the composition of paper and invented the technique of papermaking. Cai was reputed for this invention in the world, and even in his own lifetime he was already given recognition for it.

【印刷术】翻译原文

印刷术发明之前，想出版新书的学者必须一字一字地抄写。北宋时期，经过多年的实验，毕昇发明了活字印刷术(movable-type printing)。他把汉字刻在一小块泥胚(pieces of clay)上，加热汉字直到其变成硬的活字。印书时，人们按顺序将活字摆在一起，印出印迹。印刷完后，他们把字分开，以后重复使用。这种方法既经济又省时。中国的活字印刷术首先向东传至朝鲜和日本，之后向西传至波斯(Persia)和埃及，最后传遍全球。活字印刷术发明促进了世界各国的文化交流。

【参考译文】

Before printing was invented, a scholar had to copy characters one by one if he wanted to publish a new book. During the Northern Song Dynasty, Bi Sheng invented the movable-type printing after many years of experimentation. He engraved the characters on small pieces of clay, and heated them until they became hard movable characters. When printing a book, people placed the moveable characters in order into a whole block and then ran off a print. After printing, they took the block apart and reused the characters later. This method was both economical and time-saving. China's movable-type printing first spread eastward into Korea and Japan, then westward into Persia and Egypt, and at last, around the world. The invention of movable-type printing greatly promoted the cultural exchanges among countries all over the world.