

## Lesson 02

### OPTIONAL READING

#### Origin of the Hook-and-Loop Fastener

面ファスナーの起源について、英文を読んでみよう。

The hook-and-loop fastener was invented by a Swiss engineer, George de Mestral.

One day in 1941, Mestral went hunting in the Alps. After he went home, he noticed that burdock seeds stuck to his clothes and his dog's fur. He looked at the seeds under a microscope. He saw many tiny hooks on them. These hooks stuck to anything with loops.

This inspired Mestral to make a fastener with a set of two bands. One had hooks. The other had loops. It was useful because they were easy to put together and take apart.

Today, this fastener is popular all over the world. For example, it is used for children's shoes. It helps them put on and take off their shoes by themselves.

(123 words)



ゴボウの実の接写（マクロ写真）



## ◆Words&Phrases

hook-and-loop fastener : 面ファスナー      Swiss : スイス人の

George de Mestral : ジョルジュ・デ・メストラル (人名)      the Alps : アルプス山脈

burdock : ゴボウ      seed : 実, 種子      stuck<stick : くっつく      microscope : 顕微鏡

hook : 鉤 (かぎ), フック      loop : 輪      inspire : ~に着想を与える      band : 帯 (状のもの)

put ~ together : ~をくっつける      take ~ apart : ~を引き離す, ばらばらにする

### Q&A

本文の内容に合うように, 次の質問に対する答えを完成させよう。

❶ What did Mestral notice after he went hunting in the Alps?

— He noticed that \_\_\_\_\_.

❷ What did Mestral see when he looked at burdock seeds under a microscope?

— He saw \_\_\_\_\_.

❸ How many bands were used for the fastener and what did they have?

— \_\_\_\_\_ bands. One had \_\_\_\_\_ and the other had \_\_\_\_\_.

❹ Give an example of how the hook-and-loop fastener is used today.

— It is used for \_\_\_\_\_.

❺ How does the hook-and-loop fastener help children?

— It helps them \_\_\_\_\_.

## Lesson 02 日本語訳

### 面ファスナーの起源

面ファスナーは、スイス人エンジニアのジョルジュ・デ・メストラルによって発明されました。

1941 年のある日、メストラルはアルプス山脈に狩りに行きました。帰宅後、彼はゴボウの実が自分の服や飼い犬の毛にくっついていることに気づきました。彼はその実を顕微鏡で見ました。それらに小さな鉤（かぎ）がたくさんあるのが見えました。この鉤は輪があるものには何にでもくっついたのです。

このことから、メストラルは 2 本の帯状のものを 1 組にしたファスナー [留め具] を作ることを思いつきました [←このことが、メストラルに 2 本の帯状のものを 1 組にしたファスナー [留め具] を作る着想を与えました。]。1 本の帯には鉤がついていました。もう 1 本には輪がついていました。それは、くっつける [→留める] のも引き離す [→外す] のも簡単だったため便利でした。

今日、このファスナーは世界中でよく知られています。例えば、子ども用の靴に使われています。子どもたちが自分で靴を履いたり脱いだりするのに役立っています。

### Q&A 解答

- ❶ What did Mestral notice after he went hunting in the Alps?  
— He noticed that burdock seeds stuck to his clothes and his dog's fur.
- ❷ What did Mestral see when he looked at burdock seeds under a microscope?  
— He saw many tiny hooks on them.
- ❸ How many bands were used for the fastener and what did they have?  
— Two bands. One had hooks and the other had loops.
- ❹ Give an example of how the hook-and-loop fastener is used today.  
— It is used for children's shoes.
- ❺ How does the hook-and-loop fastener help children?  
— It helps them put on and take off their shoes by themselves.