

国友一貫斎 【発明家】

1778年
↓
1840年

発明家 国友 一貫斎

1818年、鉄砲鍛冶の国友一貫斎がオランダ製の壊れた空気銃を、わずか1ヶ月で修理しました。その構造を理解した一貫斎は、オリジナルよりも性能の優れた空気銃「氣砲」を自分の手で作り上げました。また、空気を圧縮するほど重さが増すことに気づき、空気自体に重さがあることを初めて発見した日本人です。ちょっとした気づきから深く探求する、まさに科学する心です。空気圧の原理は無尽燈などに応用されていきました。

Kunitomo Ikkansai, Inventor, 1778–1840

In 1818, gunsmith *Kunitomo Ikkansai* repaired a broken Dutch-made air gun in just one month. After understanding its structure, *Ikkansai* built his own air gun, known as a "*kiho*," with superior performance to the original. He was also the first Japanese to recognize that the more air is compressed, the heavier it becomes, and that air itself has weight. This is a true scientific spirit, as he delves deeper into something that he has only just noticed. The principles of air pressure were applied to things like self-feeding oil lamp.

the true essence of electricity even more than Gennai. Sokichi mastered approximately 40,000 Dutch words in just four months and became the first Japanese to acquire knowledge of electricity from Dutch studies books. Sokichi expanded the Elekiteru from a mere medical device to an experimental device for exploring the laws of nature. And he compiled the results of his experiments in "Treatise on the principle of the Dutch Elekiteru" around 1811. He is known as the father of electrical engineering research in Japan.

量
文
学
者
—

1745年

1818年

Earth, which required accurate measurement of the distance on earth equivalent to one degree of latitude. Therefore, in 1800, Tadataga began surveying the Ezo. In addition to terrestrial surveys, he also conducted thorough astronomical observations, and by determining the latitude of observation points with high precision from the altitudes of the stars, he created accurate maps of world-class quality. Tadataga's maps were still in use well into the Meiji period (Late 19c to early 20c).



標本室吉ハネル 撮影禁止



氣砲（空氣銃）国友一貫斎作

Air rifle "KIHOU" by Kunitomo Ikkansai

くにともいつかんさい
國友一貫斎が作成したオランダ製の性能を上回る空氣銃です。ポンプで空氣を圧縮し、蓄氣筒に詰め
こ込んで銃身に取り付け、空氣の圧力で鉛玉を発射します。
なまりだま
付属品:「氣砲記」、「試射痕のある標的」、「玉」

This air gun, created by Kunitomo Ikkansai, surpasses the performance of Dutch-made guns. Air is compressed by a pump, packed into an air cylinder, and attached to the barrel, and lead bullets are fired using the air pressure.

Included accessories: Air gun text, Target and Bullets

1819

1120 × 276 × 213mm、鉄製 (iron)

館内企画展アーカイブ バーチャル展示室



Comments

日本語

right(C) Toyota C

卷上第3回全文

REFERENCES AND NOTES

Systems and Technologies