phasise the far-reaching importance of the principles which they have clearly explained and beautifully illustrated. It is to be hoped that the volume will be widely and carefully read. Considering the scale and style of the work, with its

FIG. 3.—Common skunk as in Fig. 2, but with sky "background" cut off by dark, making his white conspicuous; photographed outdoors from a stuffed skin. From "Concealing-Coloration in the Animal Kingdom."

sixteen coloured plates and 140 black-and-white figures, the price is very moderate.

The appearance of this new edition is, as is explained by Gerald H. Thayer in his preface, related to the great part which its principles have

played in the war. That they should have been collectively named "camouflage" is a curious instance of word-history. "Camouflage" is not to be found in Murray's Oxford Dictionary, but "camouflet" is there, with this meaning: "a mine containing a small charge of powder, placed in a wall of earth between the galleries of besieged and besieger, so as, in exploding, to bury, suffocate, or cut off the retreat of the miner on the opposite side; a 'stifler.'" "*Camouflet or stifler*" is quoted from the "*Penny Cyclopædia*" of 1836. Then, when smoke came to be employed above ground it kept the same name; and, as its chief use was to act as a concealing screen or curtain, "camouflage" became, in the Great War, transferred from the cause to the effect, and extended to concealment, however attained.

G. H. Thayer states that it has recently come to light that, in Germany, the original edition was "searched through with most diligent care for information which could be put to military or naval use." Here in England its principles were applied long before the war, for many years ago the great guns in our coast forts were painted white beneath to neutralise their shadows, and coloured above with an obliterative pattern. But while all this was done for the guns our men were sent to the war with a cap that seemed specially designed, by its reversal of principles explained in this volume, to render the head conspicuous to an enemy. E. B. P.

Obituary.

PROF. W. R. BROOKS.

PROF. W. R. BROOKS was one of the most successful of all modern comet-hunters. He nearly equalled the wonderful success of Pons, who found twenty-eight comets in the first twenty-five years of last century. Prof. Brooks's total was twenty-seven comets, but in regard to several of these he was anticipated.

Prof. Brooks was born at Maidstone, Kent, on June 11, 1844, and with his parents migrated to the United States in 1857. He was educated in various public and private schools in England and America. He was awarded the Hon. A.M. degree by Hobart College in 1891, and the Sc.D. by Hamilton College in 1898. He was director of Redhouse Observatory, Phelps, New York, from 1872 to 1888, and was appointed to the Smith Observatory in the latter year; finally he became in 1900 professional astronomer at Hobart College Observatory.

As a discoverer of comets Prof. Brooks was rivalled only by Prof. E. E. Barnard during the years from 1881 to 1911. Some of the comets detected by him during his unwearied sweeps of the heavens were of considerable importance. Thus he was the first to find, in 1883, Pons's periodical comet of 1812, and in 1886 he picked up the expected comet of Olbers, last seen in 1815; he also discovered comets of short periods belonging to the Jovian family in 1886 and 1889. The

latter broke up into several fragments and proved quite a notable object.

Like Messier, Pons, Tempel, Barnard, Perrine, and others, Prof. Brooks displayed special ability in this field of observation, and though he engaged in other departments of practical astronomy, it was in exploring the sky for comets that he met with his greatest successes. His results afford another instance of the fact that natural ability combined with enthusiasm, opportunity, and well-directed effort usually bring ample reward.

Prof. Brooks received ten gold prizes from Mr. Warner, and nine comet medals from the Astronomical Society of the Pacific; he also received the Lalande medal from the Paris Academy of Sciences, and a number of other special distinctions. He was elected a fellow of the Royal Astronomical Society on January 13, 1888. His discoveries ranged over the thirty years from 1881 to 1911, but it was during the first twenty years of this period that his principal work was done.

There was nothing in his early life or associations to lead Prof. Brooks to the pursuit of astronomy except his inclination. His initial success in making a reflecting telescope and in finding new comets enabled him to relinquish his daily avocation and to devote the greater part of his life to the study of the heavens. He died on May 3 in his seventy-seventh year.

W. F. DENNING.