Reflections in Water.

In the coloured photographs from Egypt, printed in *The Illustrated London News* on February 25, one picture has white clouds and blue sky with their reflection in still water. The image has the appearance of being stronger than the original. The fact is that the blue sky has much more polarised light than the clouds: the cross-polarisation by reflection at the water darkens the sky and scarcely alters the clouds. At the various incidences, by which the different points of the sky reach us, the conditions are altered. Thus the reflected scene is one of greater variety and stronger contrasts. The effect is not due to anything in the photographic process; I was surprised to see such a correct presentation of what I have sometimes observed.

No one could surpass the late Lord Tennyson in his love for noting various moods of nature, but perhaps the habit is more frequent with great masters of language in France than with us. Pierre Loti abounds with such passages as "Avec cette sonorité particulière que les cloches prennent pendant les nuits tranquilles des printemps." Rostand devotes the opening verses of "Chantecler" to the varied powers of sunlight: the sinking sun, for instance, which chooses

L'humble vitre d'une fenêtre
Pour lancer son dernier adieu.

There are two marked forms in which we often see this. Sometimes it is difficult to believe that there is not a fierce red fire raging in a distant house. At other times, with a higher and a whiter sun, a house on the hill may reflect the sun to us, surrounded with brilliant coloured halos. I suppose that dust upon the window diffracts the light, as do the dust plates of Fraunhofer.

The College, Winchester.

W. B. CROFT.

A Self-regulating Siphon.

In a large number of laboratory experiments it is necessary to keep a continuous flow of water through a vessel in which the level must remain constant. Some sort of self-regulating siphon is a great convenience for this purpose, and that here described is both simple in construction and very efficient in use.

The U-tube, bent out of ordinary quarter-inch quill tubing, as shown in the sketch, is narrowed at the point A, and the small piece of glass rod, C, is drawn out so as to fit this constriction. The bulb B, sealed on to the top of this rod, floats on the surface of the water. The U-tube must be so fixed that when the water is at the desired level the rod just fits into A, and so closes the exit. If the level of water in the vessel D rises at all, the bulb is raised, and the excess of water flows out through the siphon.

W. H. TAIT.

King Edward VI.'s High School, Birmingham.

The Plumage Bill.

THE statement has been widely circulated by a section of the Chamber of Commerce interested in the feather trade that the aigrettes or ospreys which are now worn are, for the most part, the moulted plumes collected after the breeding season. Long ago Prof. Alfred Newton exposed this statement. He emphatically stated that "cast" feathers do not find their way into the market, and added, "I should doubt whether cast feathers have any real value at all in the plume trade," his belief being that no one concerned in it would look at them. Again, Mr. W. H. Hudson wrote:—"Each bird produces only a small number of these valued feathers, and when he sheds them he does not shed them all together in some spot where a feather-hunter will be sure to find them. He

drops them one by one at odd times, some falling in the water where he fishes, some among the trees and rushes where he roosts, and some are shed when he is on the wing going from place to place."

Sir E. Ray Lankester, Mr. W. P. Pyecraft, and Mr. James Buckland testify to the truth of the foregoing. Sir E. Ray Lankester says:—"It is always the parent bird, slain at the breeding season, which supplies 'ospreys' for women's hats and bonnets. . . . I am quite tired of assuring the public of the facts of the matter."

In introducing his Bill to prohibit the sale, hire, or exchange of the aigrette and other plumes, Mr. Percy Alden stated that last year some thousands of ounces of these plumes were offered for sale at Mincing Lane. It is estimated that this amount represents the breeding plumes of about 20,000 parent birds, the fledglings of which were probably left to die of starvation. Legislation is the only means of coping with this insensate massacre.

JOSEPH COLLINSON.

York House, Portugal Street, W.C., February 28.

Edward Blyth and the Theory of Natural Selection.

WITH reference to Mr. H. M. Vickers's letter in *NATURE* of February 16, I may perhaps mention that the Edward Blyth who edited Gilbert White's "Selborne" in 1836, a reissue of which was made in 1858, dated his "advertisement," or preface, from "Lower Tooting, November, 1836." Blyth's bird notes to this edition are extensive, but the other portions of the book are very free from annotation.

EDWARD A. MARTIN.

285 Holmesdale Road, South Norwood, S.E.

Cat Playing with Shadow.

CAN any correspondent of *NATURE* recall a case of a cat playing with a shadow?

I know of a cat—a blue Persian—which appears to wait until the morning sun throws the shadow of a cage-bird on the wall of a room, and then seems to play at catching the shadow of the bird as it moves about.

H. S. G.

22 Kensington Park Gardens, W.

THE A-KAMBA OF BRITISH EAST AFRICA.

MR. HOBLEY has again put ethnologists in his debt by giving another series of observations on certain tribes of British East Africa. His monograph on "Eastern Uganda: an Ethnological Survey," published by the Royal Anthropological Institute in 1902 was followed in 1903 by a valuable paper, "Anthropological Studies in Kavirondo and Nandi," in the *Journal* of the Institute. In the present volume he deals mainly with the A-Kamba, who inhabit a large area south and south-east of Mount Kenia, and about whom we have hitherto had extremely little information, with the exception of a capital general and comparative ethnographical account by J. M. Hildebrandt in the *Zeitschrift für Ethnologie*, Bd. x., 1878, p. 347. A small book containing vocabularies of the Kamba and Kikuyu languages, compiled by Mrs. Hinde, was published by the Cambridge University Press in 1904, but no details are given about either people.

The A-Kamba are probably the purest representatives of the Bantu stock in British East Africa; they are a sturdy people, the males being about 5 feet 6 inches in height. The average cephalic index of ten men is 78.6, while that of two skulls is 74. The nose is platyrrhine. Two general types of head are noticeable, one "with very wide massive jaws, curved sides, and tapering towards the forehead, a very coarse negroid type, and the other is, comparatively speaking, a more intellectual type, with a wider fore-

1 "Ethnology of A-Kamba and other East African Tribes." By C. W. Hobley, C.M.G. Pp. xvi+174. (Cambridge: University Press, 1910.) Price 7s. 6d. net.

head and narrower in the region of the jaws; the chiefs generally belong to the latter type. It appears to be impossible to discover any reason for this variation." Periodically numbers of the younger people are seized by a peculiar form of hysteria (resembling the so-called arctic hysteria), and the sight of a hat or cap, or sometimes of a dog, causes the patient to fall into convulsions, until the obnoxious object is removed from sight. The numerical proportion of the sexes is equal, and polygyny is fast

of a very secret character in the woods; in the darkness of the night a weird booming roar is heard, and the youths sit and shudder with fright. This is said to be caused by a fearsome beast, which on the third day is supposed to be killed and its flesh eaten by the novitiates. Very little is known about this ceremony, which is evidently one of great antiquity and interest.

The second part of the book contains some valuable notes upon a few other tribes; of especial im-

FIG. 1.—Pictographs cut on a stick representing a star; moon; arrow; black, red-legged millipede; python, the dots represent the spots on the reptile's skin; spider; tortoise; lizard; wooden jar for carrying honey. From "Ethnology of A-Kamba and other East African Tribes."

dying out. The A-Kamba are the only people in East Africa who chip the upper incisor teeth to a point; filing or chipping the teeth is generally supposed to be associated with cannibalism, but so far as can be ascertained no such custom exists or has existed among the A-Kamba. The ornaments, clothing, implements, arts and crafts of the people are succinctly described, but the most valuable portion of the book is that dealing with the social and religious aspects of native life. The birth, marriage, and death customs are recorded, but those connected with puberty are of greater interest. Circumcision is performed when the child is about four or five years

portance are the notes on the social organisation of the Masai, among whom a geographical grouping is replacing the older clan grouping; the marks branded on the cattle correspond to the latter, while the designs on the shields have a territorial significance. Mr. Hobley directs attention to the promising field for research, not only in the ethnology but in the archaeology of British East Africa. His little book, which is extremely well illustrated, serves to emphasise how much more there is to be done; for example, he has discovered a new small pastoral tribe, the Mogogodo, on the foothills on the north side of Kenia, who possess a remarkable language, and features that remind one of certain ancient Egyptians. In a prefatory note, Prof. Ridgeway strongly endorses the remarks of Mr. Hobley on the importance of Government officials having a preliminary training in anthropology.

A. C. HADDON.

FIG. 2.—Matungi, chief of the Mogogodo tribe. From "Ethnology of A-Kamba and other East African Tribes."

old; this is only a small affair, but more important is an initiation ceremony, which lasts for several days, at which several hundred young people are often present; the boys and girls are divided into batches of ten or fifteen, with a fully initiated youth or girl in charge of each batch. It is the duty of these tutors to teach their pupils their duties in life; they also cut pictographs on sticks, the meaning of which the neophytes have to discover. Some two months later the youths only undergo a ceremony

THE TOKYO IMPERIAL UNIVERSITY.

THE peoples of the West for a long time had the impression that while the Japanese had great artistic ability and could imitate the productions of other countries, they had little or no originality. Notwithstanding all that they have accomplished during the past forty years or so, both in the arts of peace and war, that impression still prevails to a considerable extent, and we frequently hear opinions which do not do justice to their general ability, their trustworthiness, or their originality. It would take us too far afield if we attempted to disprove those opinions from what the Japanese have accomplished, but a perusal of the reports of the Minister of State for Education and of the calendar of Tokyo Imperial University shows that the developments which have taken place in Japan in recent times are not the superficial veneers which some people would have us believe they are, but, on the contrary, that they have been made on a solid foundation of education.

The annual report of the Minister of State for Education is a most interesting document, and shows that during the time which we have mentioned every department of education which is necessary to train men and women for all the duties of a modern State has been very fully developed. Elementary schools are to be found in every part of the country, and secondary schools have been established in the more important centres of population, while a great variety of special and technical schools, fit for all the functions required under the new conditions, which are the result of the adoption of Western science and habits of life.