

and that their droppings made the boat in such a mess that he had the surface of both beams smeared with tar. Later on, the "terrace" was observed, occupying the surface of the beam alongside of the nest; but it did not strike Mr. Harcourt at the time that there could be any relation between this and the tarring.

The inference, however, is, that the definite object of the "terrace" was either to anticipate the tarring of that particular beam on which the young birds must necessarily perch as soon as they were able to leave the nest; or else to obliterate any traces of tar which they themselves may have left there after perching inadvertently on the tarred beams. In either case, if there is really any relation between the "terrace" and the tarring, it seems likely that the birds, having to meet an emergency, displayed a very unusual degree of reasoning power, and adapted means to end in a very ingenious way.

Oxford, January 29. W. WARDE FOWLER.

The Crowing of the Jungle Cock.

IN the letter in your last issue (p. 295), in which Mr. Forbes endeavours to controvert my statement with reference to the crowing of jungle fowl, his account is extremely vague and indefinite. He admits he did not secure the bird, and omits to name the species; he cannot say it was a pure-bred jungle fowl, and according to his account the voice was "considerably thinner in volume, more wiry, and higher pitched." I have no doubt that there are in Timor plenty of common fowls, and knowing how readily they will cross with the jungle fowl, I think it highly probable that Mr. Forbes may have heard the crow of a hybrid: hybrids are, in some places, as common and wild as the pure breed. Wild caught hybrids are frequently brought here and offered as pure-bred birds.

I have had from time to time in my keeping all the known species of the genus *Gallus*, and have bred from most, if not all of them, and have had ample opportunities of listening to their various calls and crowing frequently uttered during their breeding season, and I must say none of them can fairly be compared with the loud, fine, clear crow of our common barn-door cock.

A. D. BARTLETT.

Zoological Society's Gardens, Regent's Park,
London, N. W., February 2.

On the Flight of Oceanic Birds.

THE very interesting letter of Mr. David Wilson-Barker under the above title in *NATURE* of January 8 (p. 223) leads me to say that during a recent voyage to Ivigtut, Greenland, I very often observed in the flight of the Arctic tern the same use of wings and tail which Mr. Wilson-Barker saw in the flight of the sooty albatross. I further noticed that the terns very frequently made use of their feet in steering a course through the air.

It was a common thing for a tern to poise itself on a windy day directly above the taffrail, and hold that position, regardless of the speed of the vessel, for from eight to ten minutes, examining, the while, everything abaft the house, apparently with a critical eye. When satisfied with the inspection, it would with a quick motion lower one of its black-webbed feet down with the web across the line of flight. The effect of this was exactly like that of a ship's rudder. When the left foot was drooped, the bird turned to port; when the right, to starboard. If the foot were lowered but a trifle, as sometimes was done, the bird turned but slightly; when lowered straight down and spread wide out, the bird turned almost as if on a pivot.

When the bird was sailing beside the ship, a foot was sometimes used to correct the course, which had been altered apparently by a flaw or eddy in the wind caused by the sails. Of course, the wings and the tail were very often used in conjunction with the foot, but I never saw the foot used when the bird was flying by flapping its wings continually.

New York, January 21. JOHN R. SPEARS.

A Rare Visitor.

JUST before the recent thaw I observed a water-rail searching for food in my garden. It approached within a few yards of the house, and showed very little timidity. It reappeared on two subsequent days, and was also seen in adjacent gardens; but it finally left when the frost was completely gone.

NO. 1110, VOL. 43]

It is so very unusual to be visited by so shy a bird that I have thought the incident worth recording as an indication of the severity of the recent frost.

My house is in the suburbs of Reading.

Craven Road, Reading, January 30. O. A. SHRUBSOLE.

The Erosive Action of Frost.

A SOMEWHAT striking illustration of the erosive action of frost was to be seen on a reservoir (North Wales Paper Company's) near here a few days ago. The reservoir—a fairly large one—is supplied by a stream entering at its upper end, and during the late severe frost was covered with ice to a thickness of about 8 inches, the ice being firmly attached to the mud and soil of the banks, especially in the narrower parts. With the thaw, about ten days ago, came a very heavy fall of rain, which resulted in the depth of water in the reservoir being raised some 2 feet. The sheet of ice then floating on this increased surface area tore away for long distances the adjacent mud and soil to which it was attached, and to such an extent that the contour of the banks at the narrower portion of the reservoir was completely reproduced by a band of soil from one to two feet wide fringing the sheet of ice, and upon which were growing many plants, grasses, &c. As the ice melted, this material would seriously assist the silting up of the reservoir, and no doubt similar action has taken place in other cases.

H. T. M.

Flint, North Wales, January 31.

Skeleton of Brachycephalic Celt.

LAST November, whilst some excavations were going on in the back premises of a house in Albion Road, Dunstable, a human skeleton was lighted on, resting on the right side, with the right hand to the face, and the knees drawn up in a crouching manner.

It fortunately happened that the tenant of the house had, some time before, seen two contracted skeletons of Celts in my possession, and he saw that the skeleton newly uncovered was probably of the same class with mine. He therefore called upon me at once, and as I happened to be at Dunstable, I returned with him to the spot and superintended the recovery of the bones.

The grave was about 5 feet deep, dug into the chalk rock; the head of the skeleton was to the north-east; the grave was filled in with clean, white, small, chalk rubble containing a considerable number of non-human broken bones and a few teeth.

Close to the femora of the man, on the inferior side, were two horn-cores of *Bos longifrons*, each attached to part of the skull, and taken from different individuals. Near the horn-cores were two whitish oval pebbles about the size of a bantam's egg, and a small piece of Romano British pottery. No flint implements or flakes were in the grave.

As the interment was in chalk rock, with the dy covered with fragments of clean chalk, the bones when found were perfect in form to a remarkable degree. Of course, however, the remains were quite flat, with the skull crushed in and the lower jaw and most of the larger bones broken. On touching the maxillary bones, all the teeth dropped out. All the pieces of bone were brittle, and somewhat soft. After careful cleaning, drying, soaking in thin hot gelatine, and conjoining with shellac dissolved in spirit, it became possible for me to repair and replace nearly every bone—including all the vertebræ—in position.

Virtually the skeleton is perfect; no bones are missing, except one clavicle, a few of the small bones of the hands and feet, and the small terminal bones of the sacrum. Only one or two teeth are deficient. The skeleton represents a man of early middle life, and of considerable muscular strength; the height of the man when alive, as deduced from the femora, was 5 feet 7 $\frac{3}{4}$ inches.

Mr. A. Smith Woodward, of the British Museum, South Kensington, has kindly looked over and compared some of the small pieces of non-human bone and the teeth found in the grave covering; many of these he has determined as belonging to *Bos longifrons*, others to *Equus*, &c.

The two other Celtic skeletons mentioned at the beginning of this note were dug up by me in 1887, by permission of a farmer, from two ruined, round tumuli in a field on Dunstable Downs.

One is the crouching skeleton of a girl from 18 to 25 years of