

**BLACK COCKATOOS.**

The gardens of the Zoological Society, London, have recently been enriched by the acquisition of the great black cockatoo of New Guinea and the adjacent islands. The structure and habits of this bird render it one of the most remarkable of its tribe. Its favorite food in its native state consists of the kernel of the canary nut, which grows on a lofty forest tree abundant in the islands where the birds are found. These nuts are so excessively hard that it requires a very heavy hammer to break them; but they are readily opened by the extraordinary mandibles of the bird, which, taking one in its bill and holding it against the notch in the narrow upper mandible by means of the singular, horny-tipped cylindrical tongue, cuts a notch in it by sawing the cutting front edge of the lower mandible from side to side. This done, it is enabled to break off a small piece of the hard shell by a strong bite, and then, with the long tip of the upper mandible, it picks out the kernel piecemeal. The tongue itself is very singular, being a bright red cylinder with a horny black tip, and having two roots diverging to each side of the lower jaw. The appearance of the bird is remarkable. The bill is of immense size and strength; the head very large, possessed of powerful muscles to wield the jaws, and covered with a feathered crest. Than this singular bird perhaps no living animal offers a more striking example of the exact relation that always exists between the structure of an animal and its habits. It is evident that the form of its extraordinary bill alone enables it to live upon a kernel that cannot be obtained by any other bird.

The coloring of the animal is almost as remarkable as its structure. The entire plumage is slaty black, powdered with the white excretion from the skin that is so abundant in cockatoos, pigeons, and some other birds. The bare, skinny cheeks are of a blood-red color, varying in intensity with the health and condition of the bird. The scientific name of the species is *microglossa aterritima*.

**THE IGUANA FAMILY.**

The lizard tribe furnishes one of the most universal and persistent types in all natural history. No country is entirely without them, and none but the very earliest geological formations fail to furnish specimens of this remarkable race. Of the iguanas, the characteristics are mainly the horny scales which cover the body, and the toes, which are distinct and free. The serrated crest along the ridge of the back is generally present; and the teeth are usually set in a common alveolus, but sometimes they are attached to the free edge of the jaw bone.

The specimen herewith represented is a native of Australia, where eleven species of the tribe have been found, all of which are described in Dr. Gray's catalogue. One observable feature is the long, conical tail, covered with overlapping scales. The head is flat and triangular, and the small scales covering the upper parts of the body are intermixed with a kind of thorny tubercles, seen also along the back of the body. The elevated crest along the backbone is not found in this instance, but the scales all over the body are elongated and sharp-pointed, so that the animal is furnished with ample exterior protection.

The color of the upper part of the head, the feet, and the lower part of the face is yellowish; the throat and the sides of the neck are of a deep black color, and the sides of a brownish hue; the back is grayish brown, and the belly and chest show yellowish spots surrounded with circles of brownish black, on a clear brown skin.

**A Lesson for Brakemen.**

A railroad brakeman, who had been celebrating his grandfather's birthday, was arraigned before a Detroit police court. "You run on the cars, eh?" asked the court. "Yes, sir." "And you belong to that class of men who open the door as the train stops at Pontiac, and yell out 'Upontyack!' at the passengers." The man was silent. "It makes my bones boil to think how I've been used on these railroads," continued His Honor. "The seats are locked, the water cooler empty, the windows won't stay up, and every few minutes you open the door and cry out 'Jawkun' for Jackson, or 'Kl-a-zoo' for Kalamazoo. I believe I'll mark you for six months." "Please, sir—" protested the prisoner. "I must strike a blow at this great evil somewhere, and I might as well commence on you." "Please, sir, I was never here before, and it's my first drunk in four years." His Honor leaned back

and chewed the corner of a blotting pad while he reflected. Finally he said: "Well, I'll let you go, though I'll be blamed for it. Now, sir, after this you want to adopt a different style. When the train approaches a station, you want to go through the car like a cat, smile gently, and say in quiet tones: 'Ladies and gentlemen, this train is now in the outskirts of the beautiful city of Ypsilanti, and such of you as desire to step off will please make ready; and may health and prosperity ever attend you.' What an innovation that

within ten miles of London, in one and a half hours. Should the present efforts to educate the birds prove successful, next summer will find an almost daily ocean mail in practical operation, as it is believed that the flight from continent to continent can easily be accomplished between sunrise in one hemisphere and sunset in the other.

**Recent Arctic Explorations.**

The Pandora, a small screw steamer which left England for the arctic regions in search of relics of the ill-fated Franklin expedition, recently returned to Portsmouth after a brief but eventful voyage of three months duration. Following Sir John Franklin's track, the vessel, after leaving Upernavik, steamed to the westward and penetrated further in that direction than any other ship has yet succeeded in doing. A yacht, abandoned by Sir James Ross, was found beached and in fair condition; and the storehouse built by the same explorer, together with the graves of some of Franklin's men, were visited. The Pandora brings back the news that the Alert and Discovery, of the British expedition, are now in Smith's Sound, and that there are indications that that body of water is comparatively free from ice.

The ease with which the Pandora, small as she is, accomplished so long a journey—one which Franklin, with his sailing ships, occupied two years in performing—in the brief period abovementioned, augurs well for the success of Captain Nares. The efficacy of steam is fully shown; and as the Polaris hardly merited the designation of a steamer, the Pandora is really the first to prove what even moderately powerful engines will do toward breaking through the ice floes. With the channel as open as is reported, and driven on by their strong machinery, it is not impossible to believe that the Alert and Discovery have already attained the borders of the open polar sea.

**New Life-Preserving Mattress.**

Interesting trials of the Gay safety mattress were lately made at the Maritime Exhibition, Paris. This mattress folds in two, longitudinally, forming a double belt, with attachments to fasten it to the person in such a way that it cannot possibly be displaced. It is formed of a double row of *boudins*, or "sausages," made of cork cuttings tightly compressed by machinery within a waterproof impermeable case, and the whole covered and incased in No. 7 canvas. The cork ribs are about 8 or 9 inches wide, and half that in thickness. The whole forms a mattress, one like which is intended to be placed in each sailor's hammock, cot, or berth, it makes a bed which, contrary to what might be expected, is elastic and easy to lie on. Its weight is about 6½ lbs., and it suffices to sustain in water the weight of four men, so as to save their lives, as was conclusively shown by the experiments on this occasion.

The celerity with which this valuable aid can be rendered available was shown by the fact that a man lying thereon in the hammock, on a given signal, drew out the safety mattress, arranged and put it on, fastening it perfectly, and jumped into the water, all within the space of three quarters of a minute. Thus every one on board a ship may have at immediate command, in case of accident, the means of enabling him or her to float without other aid in the water, even assisting others, and so to await the arrival of further aid, by ships or boats; thus materially multiplying the chances of safety, which, after all, is the utmost that can certainly be attained, be the life-saving apparatus what it will.

Another important point in this appliance is that, as was also shown, the motion of the limbs, as in swimming, are entirely free and unfettered by the mattress, when thus used as a cincture; moreover, in case of wreck and being cast ashore, this appliance is calculated to afford great protection to the body, and mitigate the shock if the wearer be thrown by the waves against a rock or beach; or should any one or more of the separate cork ribs be cut or damaged in any way by such collision, being independent, the cincture as a whole retains its buoyancy and life-saving power unimpaired.

AFTER filing a saw, place it on a level board and pass a whetstone over the side of the teeth until all the wire edge is off them. This will make the saw cut true and smooth, and it will remain sharp longer. The saw must be set true with a saw set

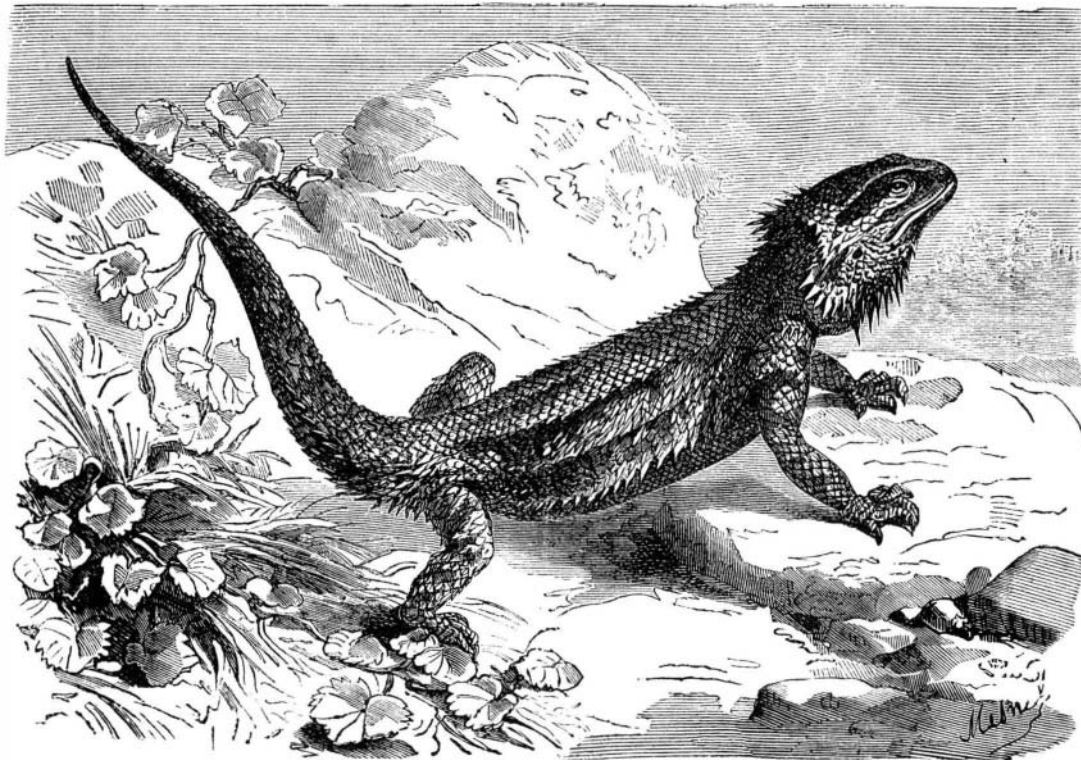


THE GREAT BLACK COCKATOO OF NEW GUINEA.

would be, sir! How the travelin public would rush for your road! Will you do this, Mr. Wellington?" The prisoner promised, and was allowed to go.

**Too Much of a Good Thing.**

Messrs. Smith and Potts, inventors of the ingenious adding pencil which we illustrated and described a few weeks ago, send us a pathetic appeal to stop the avalanche of letters, orders, and inquiries which have poured in upon them since the notice of their invention appeared in our columns. They want the "wholesale waste of stamps" arrested, because they do not sell pencils, but only the rights to manufacture them. We hasten to comply with the request. Our readers, excepting those desiring to purchase rights as aforesaid, will



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please stop this reckless "waste." There are plenty of inventors and manufacturers who want their letters. Those who have written to the above parties without getting their orders filled are advised to consult our advertising columns and the illustrated inventions which appear in each issue of the paper. They will always find some new article in which they can invest to advantage.

**A Transatlantic Pigeon Post.**

Experiments are now in progress in England, in training a variety of carrier pigeon indigenous to Iceland, the object being to establish, if possible, a pigeon transatlantic mail between the United States and England. The bird is of great docility, intelligence, and spirit, and is naturally ocean-homing. Its speed is over 150 miles per hour, and it is said to be able to return to its habitation from any part of the world. A pair of these pigeons recently carried despatches from Paris to a lonely spot in a wild and rocky part of Kent,