

THE DEMOISELLE AND PEACOCK CRANE.

The demoiselle crane is found in Central Asia, Middle and South Africa, and sometimes in Eastern Europe. The plumage of this beautiful bird is a blue gray, the front part of the neck is black, and it has snowy white ear tufts; there is also a tuft of long, flowing black plumes hanging from the breast, the wings are grayish black, the eye bright carmine, the bill at the root a dull green, but toward the point it is the color of horn; the feet are black. The ornamental feathers of the head and breast are lacking in the young bird.

The movements of this bird are generally slow and dignified; it only hastens and runs in cases of necessity. It raises itself easily from the ground by one or two bounds, gains the requisite height by a few strokes of its powerful wings, and flies with its head and legs stretched out straight from its body. But this bird often acts in the most singular manner, dancing on the tips of its toes, nodding its head, and flapping its wings in a grotesque fashion. In exuberance of spirits it sometimes takes little stones and pieces of wood from the ground, throws them in the air, and tries to catch them again, dancing and springing and running hastily to and fro; but it is always graceful and beautiful.

These birds are very cautious, and it is a difficult matter to outwit them or take them by surprise. The single bird thinks only of its own safety, but a company of the birds post regular guards, upon whom devolves the care of the flock. If they are disturbed, they send out spies to reconnoiter before they approach again the spot where they were frightened.

about two hours; then it goes to the sand banks in the stream to drink and dress its feathers. Sometimes it makes a short excursion for food in the middle of the day, but generally the morning meal satisfies it for the whole day. Toward evening the flock divides into smaller groups, and they fly away to their sleeping place.

These beautiful and remarkable birds are often tamed in the western part of Africa and sent to Europe. One writer saw one of these birds running around the streets of Lisbon. Bread and other food was thrown to it, and it had become so accustomed to these gifts that it plainly demanded them.

In zoological gardens visitors are attracted to their cages because they almost always begin to dance as soon as they hear the music. Their height is about four feet.—*From Brehm's Animal Life.*

Glass from Granulite.

The manufacture of "pale metal" glass from the rock known as granulite has been carried on successfully by F. Siemens at Dresden, Saxony, and at Elbogen, Bohemia. The superiority of the glass and the great economy of production have secured to him a very large share of the bottle trade of the Continent; the output of his works during the year 1880 having been about twenty-two millions of bottles, which has since nearly doubled in number annually.

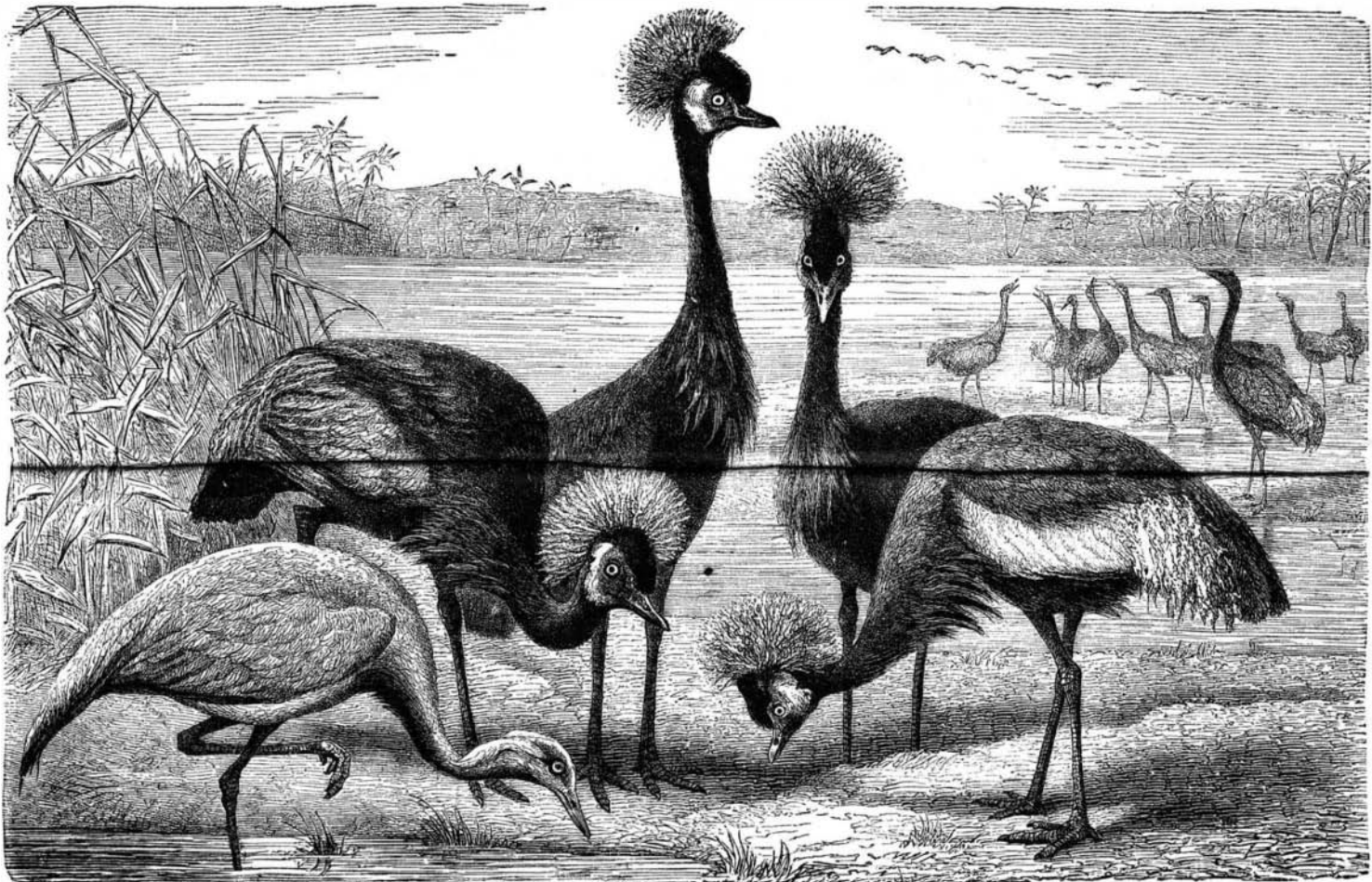
It is now proposed to establish works in England to manufacture glass extensively from a deposit of granulite which has been discovered at Meldon, Devonshire, and using the Siemens process. Mr. Siemens, to whom a sample was sent,

that the deposit at Meldon has been examined by W. F. Rutley, F.G.S., who finds it to be in quantities sufficient to supply any likely demand for glass manufacture in England for the next thirty years. It is proposed to put up the works at Swansea, and to connect the quarry at Meldon by a siding with the London and Southwestern railroad system—by which the granulite will be taken to the port of Fremington, to be sent thence by water at small cost to the works at Swansea. The advantages of this location rest in cheap coal, limestone, and labor, with works already built, excepting Siemens' continuous melting tanks, which are to be added, a license having been obtained from Sir William Siemens. The company proposes to make not only bottles in large numbers, but glass castings, as substitutes for woods and metals. Among other articles, millstones, gas and water pipes, and even railroad ties are enumerated.

These facts should stimulate a search in this country to determine whether deposits of magnitude of suitable granulite are favorably located for transportation to make their development practicable and profitable.—*Eng. and Min. Jour.*

Salt for the Human System.

The London *Lancet* combats the folly of some would-be improvers on Galen, who decry the use of salt as a food condiment because it is a mineral. The *Lancet* says that common salt, chloride of sodium, is the most widely distributed substance in the body; it exists in every fluid and in every solid; and not only is everywhere present, but in almost every part it constitutes the largest portion of the ash



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Although this bird is so cautious when free, in captivity it attaches itself to its keeper.

It subsists upon grain, seeds of various kinds, and also eats grass and young plants. It captures worms and insects, especially beetles. In thickly populated India, where grain is of much value, the cranes that pass the winter there are considered very injurious birds, and are looked upon with jealous eyes. They are often pursued and driven away. The demoiselle crane is about three feet high.

The peacock crane (*Balearica pavonia*) is black, the crown golden yellow and black mixed, the wing coverts pure white. The cheeks are scarlet, the bill black, white at the point. The foot a grayish black.

The native country of these birds is Central Africa; they are found upon the shores of streams, and during the rainy season may sometimes be seen in companies of a hundred.

Its gait is stately; it holds its crown erect. As a rule it walks slowly, but it can run very swiftly.

When about to fly, it runs along on the ground for a short distance with spread wings and then rises in the air. Its flight is slow, the wings move with measured strokes, the neck is stretched out, and the crown laid back.

Like the demoiselle crane, this bird occasionally indulges in fantastic gambols, springing sometimes a meter from the ground, spreading its wings, and dancing about. Its voice is very loud, sounding something like a trumpet. It eats seeds, especially the seeds of a kind of grass, also insects, mollusks, and small fishes.

The daily life of the peacock crane is very regular. From its sleeping place it goes out upon the plain at the rising of the sun in search of food, where it remains generally for

wrote approvingly of the quality as follows: "The small piece of granulite seems everything we could wish for. If that kind of stone is to be found in large quantities, and of a uniform character, and easily to be got, it might prove quite a treasure, as it consists almost exclusively of silica and alkaline matter, with perhaps 15 per cent of alumina and but little iron."

These are the essential qualities of granulite for glass making. The rock is generally classed as a member of the granite family. It consists mainly of quartz and orthoclase feldspar, and is either granular or schistose. It is sufficiently rich in the alkalis to fuse and to make a pale green glass, if a little lime is added sufficient to secure a perfect fusion of the quartz. The rock is nearly white, and in fact is known by the Germans as *Weissstein*. It should not contain much iron; the Saxon variety does not contain over 0.71 per cent. Similar rock, or rock which would serve equally well for the manufacture of glass, is found in Canada and in California, and probably in New England.

The economy in the use of the rock over the use of the ordinary sand and alkali is shown by Mr. Siemens, who states that, at his works in Dresden, the batch for ordinary green glass with granulite costs 8d. per hundredweight, and gives 93 per cent of glass; while the batch with sand costs 13d. per hundred weight, and yields only 67 per cent of glass; consequently glass from granulite costs only 8 1/2 d. per hundredweight, while that from the sand batch costs nearly 20d. or more than double, if calculated upon the glass. There are, besides, advantages in favor of the granulite in respect of fuel, labor, and wear and tear of furnaces. In the prospectus of the English company, it is stated

when any tissue is burnt. In particular it is a constant constituent of the blood, and it maintains in it a proportion that is almost wholly independent of the quantity that is consumed with the food. The blood will take up so much and no more, however much we may take with our food, and, on the other hand, if none be given, the blood parts with its natural quantity slowly and unwillingly. Nothing can demonstrate its value better than the fact that if albumen without salt is introduced into the intestines of an animal, no portion of it is absorbed, while it all quickly disappears if salt be added. The conclusion therefore is obvious that salt, being wholesome, and indeed necessary, should be taken in moderate quantities, and that abstention from it is likely to be injurious.

Ocean Rafting.

A raft of timbers intended for spiles was brought from St. John, New Brunswick, to New York city August 26, after a voyage by steam tows of three weeks. The distance is 600 miles, an average of 60 miles per day. The raft, if such it can be called, was 800 feet long and 30 feet wide, drawing about eight feet of water. It was formed by sections of eleven cribs each, containing about 500 spiles of sixty-five feet length. Over and around the sections great chains were wound. Between each cargo there was a wide space to allow free working of the raft in a rough sea. The cargoes weigh about 250 tons each, and it would have cost about \$25,000 to bring them to New York by sailing vessels, as the boats engaged in this kind of transportation demanded extra pay on account of the size of the raft. The raft was towed by two powerful tugs.