

four other cocks (supposed to be chickens from the white cock) of a dapple-grey colour. Several other farms in various districts possess such varieties, and it is suggested that this unusual color may be due to age.

The ostrich is omnivorous, and is accredited with being to the last degree impartial as to the nature and quality of what it swallows, exercising doubtful judgment as to the quantity of food necessary to sustain life. This is both true and untrue. It is true that it manifests little discretion in quantity, and will even die a victim to its appetite—a peculiarity no more than human, however; yet when good and bad food is placed before it it will select the more suitable, and where it has opportunity of choice will reject some kinds of food altogether. There is no doubt as to the great acuteness of its senses of smell, sight and taste. It has been known to refuse doses of medicine, though ingeniously concealed within a prickly pear, of which it is so fond. Though greedily snapping up lizards, snakes, and other reptiles, it is not especially fond of fish, nor, indeed, of any kind of grain; Indian corn, or, as it is called in South Africa, "mealies," being probably its favorite among cereals.

Of the tremendous muscular power of an ostrich's gizzard in the trituration of food, few can have any adequate conception. Some amusing, though in most cases perfectly true, stories are told concerning it. Although the ostrich's gizzard is capable of exerting such great power in grinding up the most utterly foreign and naturally indigestible substances, yet when once really overloaded there is no organ so weak. Even wild ostriches, whose frames may be considered perhaps more vigorous, have been found in the veldt dead with no signs of conflict about them, but with gizzards loaded with the carcase of some animal that had been destroyed near by. But the disastrous effects of gluttony have been witnessed more frequently on the farms. Many birds die suddenly, and their death is a mystery to the farmer; but a post mortem has shown the stomach to be completely crammed with undigested grain, which from long over-feeding had so distended the organ that it was incapable of contracting on the food, or of moving the pebbles which had been swallowed to assist the process.

An ostrich's gizzard always contains a large number of pebbles of various sizes, from peas to hen's eggs. The pebbles in one dead ostrich were counted, and numbered over nine hundred! They are generally bright and hard, though often worn small and round; and it is probably the instinct of selecting these which leads the ostrich to snap up a knife, or pick a stud from the stranger's shirt front, as they often do.

(To be continued.)

Artificial Incubation.

By WILLIAM HENRY THICK, 383 Gloucester St.,
Ottawa, Ont.

No IV.

An anonymous French author improved on Mons. Bonnemains method; the inventor built a brick structure, 28 inches high by 24 inches in diameter, of a circular form, arched above, with sides an inch thick. This oven had ventilating holes one inch in diameter furnished with cork stoppers for regulating the heat. The oven was luted to a table under which was a cylinder of hot water with a pipe rising through the table into the oven, a grated fire-place being beneath. The eggs were deposited on small shelves, four inches broad, ranged around the interior so as to contain about 300 eggs. He tried about eight different broods in it, in all from two to three thousand eggs. He confesses, however, that he did not average above one chick from six eggs.

Mowbray, the great authority on poultry, tried a somewhat clumsy method, as did also Lawrence. He wrapped a number of eggs in wool, put them in a wicker basket covered with flannel, and suspended it over a chafing dish of charcoal in a chimney; the chimney screen being constantly kept fast to concentrate the heat. The temperature of the eggs was tested every three or four hours by being placed against the cheek, and the eggs constantly turned. The first attempt was a failure, but Mowbray says a second trial gave between thirty and forty healthy chicks from forty-five eggs.

We now come to the celebrated Eccalcobion, exhibited in London, England, in the year 1839, and which was visited by an immense number of persons. This establishment was in a large room in the Egyptian Hall, in Piccadilly. A large hatching oven extended along one side of the room, with an inclosure of similar size on the other for the chickens. At the bottom of the room was a glass case in which the chickens were put when first hatched, and in the centre a saucer containing broken eggs, shewing the process of incubation in different stages of advancement. The oven was divided into eight compartments, each furnished with glass, and containing a shallow box lined with cloth, the bottom covered with two hundred or three hundred eggs, placed so as not to touch each other. The boxes were heated with pipes, and a dish of water placed in each to give a moist temperature. Eggs were in a different stage of incubation in each box, the object being to have several chickens out each day to gratify the curiosity of the visitors. The chicks, as soon as hatched, were put under the glass case at the end of the room till they were two or three days old, after