

ing the air, with wings uplifted and with neck stretched forward at an angle of about 50° from the zenith. As a matter of fact, their wings are generally only slightly spread, and stationary, while their necks are carried upright, the head being slightly raised, sufficient to take most of the ordinary curve out of the base of the neck. While making this correction, it may be mentioned that the deposit of eggs on the ground, or "in the sand," is the exception, and not the rule; and eggs thus laid seldom or never become chickens. The reason why eggs are thus laid in the sand is probably that the legitimate place of deposit, the nest, is already full, or that the egg itself is sterile, a knowledge of which the bird seems instinctively to possess.—E. B. BIGGAR, in the *Field*.

Non-Fertilized Eggs.

Though the season is yet somewhat distant, but fast approaching, when fanciers and others will soon be putting aside their choice eggs from their best stock for hatching purposes, the thought suggests itself to me that a few words, at least to the novice, or young beginner, from the experience of some twenty-five years, would not be out of place and might ward off the day of disappointment and disgust. When the long and anxiously looked for day has arrived, you cautiously steal up to the old hen, to whose motherly care had been confided a number of those choice eggs, expecting at least to hear the music from the coming brood, but, alas, disappointme it and bad eggs are all that will come from that nest.

And, worse still, if these eggs have been purchased from some unfortunate vendor of "eggs for hatching from pure bred stock," upon whose miserable head now falls the anathemas of the disappointed purchaser, who blames the vendor for sending him bad eggs, and writes him to that effect, threatening to "show him up" in all the poultry papers in Christendom. And the seller of "hatching eggs" replies by saying the eggs were fresh and good, that it must be the carriage by rail or steamer that destroyed the vitality and did the mischief.

Now, I do not believe it is one or other of the above. What sane man who expected to do a business and meet with future success, would be so suicidal to his own interests as to destroy his own reputation by making his goods worthless before he sent them out. This is contrary to human nature, to say the least of it.

And then if it be the effect of carriage by rail, why does it not effect all alike under the same circumstances? One man reports a splendid hatch of 10 or 12 chicks from a setting of thirteen that journeyed some hundreds of miles by rail. He

certainly would not be of the opinion that it was injurious to "hatching eggs" to send them by rail. Another reports few, if any, from a setting that perhaps has travelled but half the distance, and put up just as well as the other.

Now, I think the cause of the whole trouble, for the most part, is in the condition of the stock from which the eggs came. Facts in my own experience go to prove what I have said. Take one case out of a number: I order from England eight dozen eggs. They came in a crate cushioned around the sides, top and bottom with about six inches of fine bog hay; each dozen of eggs put up in boxes, packed in chaff. Nothing could be nicer or better done. Now for the results; four dozen Brahmas and Cochins yield nothing; one dozen G. S. Hamburgs give a chicken for every egg; one dozen Houdans give nine chicks, with two dead in the shells; one of Black Spanish give four chicks, and one of Aylesbury ducks, nine ducklings.

Why did not the railway carriage across England to Liverpool, and passage by steamer across the Atlantic kill them Hamburgs, &c., as well as the Brahmas and Cochins?

The secret lies here: want of vitality and vigor in the stock that produced them; most likely produced by over feeding and want of exercise, with perhaps scant rations of vegetable food. I do not think those Brahma or Cochin eggs would have done much better if set in England than they did in America.

I repeat it, then, the condition in which you keep your stock will tell on the number of chicks from each nest. In winter, when generally confined to small quarters, stock are overfed and get in a condition of fatness totally unfit for breeding purposes. Therefore feed sparingly the breeding stock, make them work for their living by burying their food either in straw or the earthen floor of your hen house, causing them thereby to take that exercise which will impart vitality and vigor, which is so essential to their well-being and productiveness.

Montreal, Dec. 1st, 1880.

PURE BLOOD.

My Poultry House.

(Continued.)

FRIEND FULLERTON.—In last letter dimensions of poultry house were given. I shall now, therefore, proceed to give further descriptions and statements:—Studding, 2 by 4, was set up 3ft apart, upon 4 by 4 sills. Studding might be set 5 ft. apart. It was then inclosed on the outside with rough hemlock lumber, not much care being taken to make them fit closely, as concrete will fill up all