

## From Egg to Chick.

**F**rench scientist who removed the shell on either side of the egg without injuring the membrane, in patches about the size of the diameter of a pea, and snugly fitted the openings with bits of glass, gives the following reports of the wonderful experiment; I placed the egg with the glass bulls' eyes in an incubator, run by clock work and revolving once each hour, so that I had the pleasure of looking through and watching the change upon the inside at the end of each sixty minutes. No changes were noticeable until after the end of the twelfth hour, when some of the lineaments of the head and body of the chick made their first appearances. The heart appeared to beat at the end of the twenty-fourth hour, and, in forty-eight hours, two vessels of blood were distinguished, the pulsations being quite visible. At the fiftieth hour an auricle of the heart appeared, much resembling a lace or noose folded down upon itself. At the end of seventy hours we distinguished wings, and two bubbles for the brain, one for the bill, and two others for the forepart and hind part of the head. The liver appeared at the end of the fifth day. At the end of 131 hours the first voluntary motion was observed. At the end of 138 hours the lungs and stomach had become visible, and four hours later the intestines, the loins and the upper mandible could be distinguished. The slimy matter of the brain began to take form and become more compact at the beginning of the seventh day. At the one hundred and ninetieth hour the bill first opened and flesh began to appear on the breast. At the one hundred and ninety-fourth the sternum appeared. At the two hundred and tenth hour the ribs had begun to put out from the back; the bill was quite visible, as was also the gall bladder. At the beginning of the two hundred and thirty-sixth hour the bill had become green, and it is evident that the chick could have moved had it been taken from the shell. Four hours more and feathers had commenced to shoot out, and the skull to become gristly. At the two hundred and sixty-fourth hour the eyes appeared and a few hours later the ribs were perfect. At the three hundred and thirty-first hour the spleen drew up to the stomach and the lungs to the chest. When the incubator had turned the egg 355 times the bill was frequently opening and closing, as if the chick was gasping for breath. When 451 hours had elapsed we heard the first cry of the little imprisoned biped. From that time forward he grew rapidly, and came out a full-fledged chick at the proper time.—Poultry Keeper.

We guess there was more than one scientist engaged in that job. Or who could unaided watch this development at the end of every hour? But perhaps the scientist referred to never sleeps. Wonder what his name is? It took some powerful attention to discover so much, having to look through the incubator glass, and through the glass "bulls' eyes" that were on the eggs and while the chick was cramped in the egg it was awful close work to see the flesh grow on the breast. The "scientist" must possess the "double millioned gas microscopes of hextra power" alluded to by the immortal "Sam." There are not many men so clever at any rate.

For the Poultry Weekly.

## Cardington Ohio Exhibition.

**I** send you list of awards of the Union Poultry Pigeon and Pet Stock Association held at Cardington, Dec. 17 to 21, this our third show was the largest ever held in this place. The judging was done by T. A. Mendenhall of Woodington, Ohio., and was satisfactory to all. We had on exhibition nearly 400 specimens of very fine birds. Yours Fraternally,

GRO. S. SINGER, Secy.

Cardington, O., Dec. 25, 1889.

## CLASS I.

Langshans—M Dezger, ckl 2nd 95, pullet 1st 96, 2d 95 breeding pen 1st. F. M. Curl, ckl 1st 25 1/2.

White Cochins—A Edgell, ckl 2d 83, hen 1st 25.

Light Brahmas—H C Gearshiser, ckl 1st 92, pullet 2d 89 1/2. G S Singer, hen 1st 90 1/2, 2d 90, pullet 1st 91 1/2, breeding pen 1st, C H Hartsack ck 2d 90 1/2 ckl 3rd 88 1/2 pullet 3d 86 1/2.

Dark Brahmas—G S Singer, ckl 1st 92 1/2, hen 1st 94 1/2 2d, 91 1/2.

Buff Cochins—G S Singer, ck 1st 90, hen 1st 92, hen 2d 91, breeding pen 1st.

Partridge Cochins—G S Singer, ck 2d 89 1/2, ck 1st 95 1/2, hen 1st 94, 2d 90, pullet 1st 93 1/2, 2d 91, breeding pen 1st.

## CLASS II.

Americans—Black Javes—Moll Parrot, Mt Gilead, hen 1st 95 1/2; Frank Sage, ckl 2d 91 1/2; C H Hartsack, ckl 1st 92, pullet 2d 91, 3d 93 1/2, breeding pen 1st; I Z Hopper, hen 3d 84 1/2, F A Shoemaker, ck 2d 89, hen 2d 90, pullet 1st 95.

White Javes—Moll Parrot, pullet 1st 92 1/2, ckl 2d 88 1/2; F A Shoemaker, ckl 3d 84.

Whita P Rocks—R P Buffington, Mechanicsburg, Ohio, Pullet 3d 92 1/2, C H Hartsack, ckl 1st 95, pullet 1st 93 1/2, 2d 93, F A Shoemaker, ckl 2d 91 1/2, hen 1st 92.

Buffed P Rocks—Frank gage, ckl 1st 90 1/2; J H Fringle, ck 2d 89 1/2, hen 1st 92, pullet 2d 90, breeding pen 1st; P Z Hopper, Ashley.