be published in the first number of the proceedings of the society, which will appear during the summer. Besides these set experiments, Mr. W. H. Pickering of Boston met with some success in the experiments which have attracted so much attention from the English society, — experiments in which a drawing thought of by one person, is reproduced by another, who has no visible means of obtaining information as to what the drawing may be. In the accompanying illustration we have reproduced all the figures as they were drawn, numbering them from 1 to 52. The upper line in each case contains the originals, and the lower the reproductions. The originals were made either by Mr. Pickering or by one of his friends, and the reproductions were most of them made by a young lady, who, on one or two evenings when the experiments were tried, met with some success. It may be well to state, that with figs. 6, 7, 8, and 20, certain extraneous causes acted which interfered with the results. The first forty figures were all made in one day; figs. 41 to 47 inclusive were made by another person; the remaining figures were made by the sensitive, so called, on a day when apparently there was no thought-transference.

MIMICRY AMONG MARINE MOLLUSCA.

IT is a curious fact, that, while among the terrestrial animals the number of known cases of protective mimicry is very large, among aquatic animals it is very small. I have no doubt that the comparative poverty of our knowledge of the habits and situation of aquatic animals in part accounts for this, but I believe also that there is really vastly less mimicking. I do not know of any marine species, that, harmless in themselves, mimic formidable species for protection; but there are instances in which forms are modified in color or shape so as to resemble the surroundings in which they live, and thus escape the observation of their enemies. In the summer of 1879, Dr. E. B. Wilson, while studying in Brooks's laboratory at Beaufort, N.C., found abundant specimens of Ovulum uniplicatum, — a mollusk living upon the stems of Leptogorgia virgulata (a sea-fan abundant there in shallow sounds). The stem of the sea-fan is of an orange-yellow color, and, further, is often marked with yellow swellings where the coral has spread itself over the shell of an attached barnacle. The Ovulum has a yellow shell; and the skin folds up over the shell, and is also of an orange-yellow color, — precisely the same color as that of the pennatulid, — so that the snail escapes notice very readily indeed. It is abundantly found upon the Leptogorgia, and never met with except associated with it.[1] Last summer at Beaufort, in trawling in ten fathoms of water, a few miles off Cape Lookout, we took a Leptogorgia whose general habit was the same as that of L. virgulata, but which was very different from it in color. In this one the color is deep rose, almost purple, and mottled with white at the openings, where the polyps are fixed. Now, the question was, Is there an Ovulum for this Leptogorgia? and on examination, sure enough, there was found a large number of the Ovulums, in this case again imitating the colors of the host. This Ovulum is undoubtedly of the same species as the yellow one, for it presents no difference except in color. The shell is red-brown; and the folds of skin that surround it in the expanded snail are deep-rose color, and *mottled with white spots*. Here, then, is another very good illustration of the familiar principle that forms will vary in adaptation to their surroundings, and of the part that mimicry may play in natural selection. Confined in aquaria, the snails sought their own corals to creep over them; and, if the red snail and yellow coral only were put into the same aquarium, the snail showed not the least desire to creep over the coral, but remained creeping about the walls of the aquarium.

I observed another snail last summer that I feel sure must owe its shape and color, at least in part, to mimicry, though here there were not so good grounds for the conviction as in the case just mentioned. I found on the beach at Fort Macon, one day after a strong southerly gale, a single specimen of an undetermined species of Scyllaea, — a nudibranch characterized by a pair of tentacle shields, and two pairs of elongate narrow processes of the skin upon the back, on the inner side of which white delicate gills are placed. This creature, when placed upon the Sargassum, or gulf-weed, shows the closest resemblance to it. The color is almost identical with that of the alga, a light brown. The body is elongate and much compressed, and the foot-sole an elongate, narrow groove, perfectly adapted for adhering to the alga stem. The tentacle sheaths and the skin processes upon the back are thin, and at the edges are wavy, and present the most perfect resemblance to the leaves (?) of the alga. The compressed body is further terminated posteriorly by a thin vertical portion like a fin,

[1] Dr. W. Breitenbach, in *Popular science monthly*, January, 1885, p. 365, mentions vaguely some nudibranch that imitates the sea anemones upon the stems of Sargassum.

which is also thin and wavy-margined. Placed upon a mass of Sargassum in an aquarium, the Scyllaea was hard to find, so closely did it imitate the appearance of the leaves. To make this an undoubted case, the Scyllaea should have been found upon the gulf-weed, and should never occur anywhere else.[1] This was found on the sand; and it is the only specimen that has ever been found by our party, so that we may consider it a rarity. As it can swim very readily, almost like a heteropod in this respect, and is naturally found only in the outside waters, the chances were against their being found in any numbers. It seems to me that there can be but little doubt that this creature presents another interesting case of mimicry, and deserves mention, and additional observation if any one is so situated as to be able to make it. Henry Leslie Osborn.

PROFESSOR HUXLEY ON DARWIN.

Our readers have been informed, that, through popular international subscription, a fund had been raised to erect a statue to Charles Darwin, and that this was recently unveiled with appropriate ceremonies at the new museum of natural history in South Kensington. We copy from *Nature* the address upon that occasion, made by Professor Huxley in the name of the committee, to the Prince of Wales as representative of the trustees of the British museum. We accompany it by a portrait and signature of Darwin, taken from a photograph obtained in London in 1872, and inscribed, "I like this photograph better than any other which has ever been taken of me. — Ch. Darwin."

"Your royal highness, — It is now three years since the announcement of the death of our famous countryman, Charles Darwin, gave rise to a manifestation of public feeling, not only in these realms, but throughout the civilized world, which, if I mistake not, is without precedent in the modest annals of scientific biography.

"The causes of this deep and wide outburst of emotion are not far to seek. We had lost one of those rare ministers and interpreters of nature whose names mark epochs in the advance of natural knowledge; for, whatever be the ultimate verdict of posterity upon this or that opinion which Mr. Darwin has propounded, whatever adumbrations or anticipations of his doctrines may be found in the writings of his predecessors, the broad fact remains, that since the publication, and by reason of the publication, of the 'Origin of species,' the fundamental conceptions and the aims of the students of living nature have been completely changed. From that work has sprung a great renewal, a true *instauratio magna* of the zoölogical and botanical sciences.

"But the impulse thus given to scientific thought rapidly spread beyond the ordinarily recognized limits of biology. Psychology, ethics, cosmology, were stirred to their foundations; and the 'Origin of species' proved itself to be the fixed point which the general doctrine of evolution needed in order to move the world. 'Darwinism,' in one form or another, sometimes strangely distorted and mutilated, became an every-day topic of men's speech, the object of an abundance both of vituperation and of praise more often than of serious study.

"It is curious, now, to remember how largely, at first, the objectors predominated; but, considering the usual fate of new views, it is still more curious to consider for how short a time the phase of vehement opposition lasted. Before twenty years had passed, not only had the importance of Mr. Darwin's work been fully recognized, but the world had discerned the simple, earnest, generous character of the man, that shone through every page of his writings.

"I imagine that reflections such as these swept through the minds alike of loving friends and of honorable antagonists when Mr. Darwin died, and that they were at one in the desire to honor the memory of the man, who, without fear and without reproach, had successfully fought the hardest intellectual battle of these days.

"It was in satisfaction of these just and generous impulses that our great naturalist's remains were deposited in Westminster Abbey; and that immediately afterwards, a public meeting, presided over by my lamented predecessor, Mr. Spottiswoode, was held in the rooms of the Royal society for the purpose of considering what further steps should be taken towards the same end.

"It was resolved to invite subscriptions, with the view of erecting a statue of Mr. Darwin in some suitable locality, and to devote any surplus to the advancement of the biological sciences. Contributions at once flowed in from Austria, Belgium, Brazil, Denmark, France, Germany, Holland, Italy, Norway, Portugal, Russia, Spain, Sweden, Switzerland, the United States, and the British Colonies, no less than from all parts of the three kingdoms; and they came from all classes of the community. To mention one interesting case, Sweden sent in 2,296 subscriptions 'from all sorts of people;' as the distinguished man of science who transmitted them wrote, 'from the bishop to the seamstress, and in sums from five pounds to twopence.'

"The executive committee has thus been enabled to carry out the objects proposed. A 'Darwin fund' has been created, which is to be held in trust by the Royal society, and is to be employed in the promotion of biological research. The execution of the statue was intrusted to Mr. Boehm; and I think that those who had the good fortune to know Mr. Darwin personally will admire the power of artistic divination which has enabled the sculptor to place before us so very characteristic a likeness of one whom he had not seen.

"It appeared to the committee, that, whether they

[1] Dr. Breitenbach, in the article above referred to, mentions without any names, and with too vague description for indentification, a creature on the Sargassum that would seem to be Scyllaea.