

effects of contrast as of sensation. Take a card, white on one side, and half green and half white on the other, with a dot in the centre of each side, to hold the attention. Look steadily at the green-and-white side for a minute, then turn the card, and the half corresponding to the green will have a red tint, and the other half will have a complementary green tint. The consecutive red image has developed, by induction, the green sensation in a part of the eye which had been impressed only by white. The same results are obtained if the subject be hypnotized. The experiment will fail if the subject is blind to the suggested color. If a subject is blind to a certain color, a peculiar case results. On giving him the hallucination of green, the sensation of red cannot be induced; but in giving the hallucination of red, which he can see, the induced sensation of green (to which he is blind) is produced.

The production of consecutive images is a normal phenomenon: so, in all hallucinations which last a certain time, a consecutive image follows. If one causes a patient in a hypnotized state to look at a square of white paper with a point in the centre, suggests that the square is red, and then suddenly presents a second similar square, the subject will say that the point is surrounded by a colored square, and the color will always be the complementary of the one suggested. This complementary color is the negative image left by the hallucination. It lasts only a short time, then becomes effaced. That similar phenomena are observed in the normal condition, may be proved by the following: if, with the eyes shut, we keep the image of a bright color in our mind a long time, then open them suddenly, looking upon a white surface, we will then see for a short time the image we were contemplating, but of a complementary color.

The following most curious experiment upon the mixture of imaginary colors helps to prove the same thing. Place two squares of differently colored paper at some distance upon a table; then place before the eye a plate of glass inclined in such a manner that the whole of one card can be seen directly, and at the same time a reflected image of the second. One can very readily cause the two papers to superpose, and become mixed. If we show a hypnotized patient the same thing, substituting blank cards, and suggesting colors for each card, they will appear mixed to him in the same manner. The necessary conclusion from this seems to be, that hallucination of a color is a suggested sensation, having the same cerebral seat as the real sensation.

THE OYSTER-FISHERY IN CONNECTICUT.

THE fourth annual report of the shell-fish commissioners of the state of Connecticut was recently issued, and contains, in concise form, much useful information. In its record of benefits accrued to the state by its system of ownership and moderate taxation of oyster-planting grounds, it offers great encouragement to those who would institute in each state systematic business methods in connection with

this one of the most important of all our fishery interests. We have before referred to the system adopted by the commission in mapping and determining permanent bounds for the natural beds and ground available for planting. The survey of the natural beds, which are open to all oystermen under certain restrictions, has been completed. They comprise 5,805 acres. The total area of planting-grounds, designated for occupancy by the commission since its organization, is 45,046 acres, which have netted to the state \$49,560. Adding to this the area previously designated by the seaside towns, and we have over 79,018 acres now under the control of individuals, of which 14,066 acres are under cultivation.

The total number of tax-paying cultivators in 1884 was 385, of whom 16 own each five acres or less, 53 between five and twenty acres each, and 332 own twenty acres or more each. The amount of tax levied, averaging ten cents per acre, was about \$6,500, of which less than \$50 are delinquent. This is trifling in comparison with the local taxation of grounds under town jurisdiction. Eleven hundred acres of grounds in the state of Rhode Island pay a tax or rent of a hundred dollars per acre to that state. The Connecticut commission has not valued grounds for taxation in excess of fifty dollars per acre, though lands have been reported sold during the year at from two to six times that amount. It is obvious, therefore, that the encouragement given by the state to those employed in this business is very great. The business is steadily growing. There are already over three hundred sailing-vessels and forty steamers employed, the latter with an aggregate capacity of 36,720 bushels; and several more steamers are being constructed. The first steamer was employed less than ten years ago.

There has been a very considerable increase in the sale of seed oysters and stock to neighboring states, and also in the exportation to Great Britain. Oysters for export are packed in barrels containing 950 four-year-olds, or 1,500 three-year-olds, the deep valve down and pressed very solid. One firm, exporting 10,000 barrels a year, has never lost a bushel by long passage, bad weather, or other causes. Many are shipped to California also. Accurate statistics are not available, as the oystermen seem to resent inquiries as an interference with their private business. In the course of time they will probably know their own interests better.

The chief injury sustained in the business is from star-fishes, which destroy the young oysters. It is estimated that over fifty thousand bushels of stars were destroyed last year. They are most destructive in the cooler weather. In July and August they form into great bunches or rolls for spawning, and lie quiet. In some localities there were few or none, in others such multitudes as had not been seen for many years. It has been suggested that the state should pay a small bounty for them; and, as they are worth something as a fertilizer, the sale would partly reimburse the outlay. The receipts of the commission were \$13,731.84; the disbursements, \$8,350.49.