When I asked a dermatologist if he knew any antidote or remedy he replied: "No, it is a good deal like a hot stove; you must keep your fingers off if you don't want them burned." I have tried ammonia, glycerine and various oils and lotions on my hands with only slight relief.

The purpose of this article is to appeal to the pharmacologists for a remedy; or still better to the organic chemists for some substitute, with which at a reasonable cost we may preserve our dogfish, kill and fix tissues, fumigate sick rooms, disinfect seed grain, poison the flies, etc., etc., while avoiding the irritating properties of formalin.

PHILIP H. POPE

WHITMAN COLLEGE

BASKING SHARKS ON THE PACIFIC COAST

THE staff of this station were interested in Mr. Gudger's account of the capture of a basking shark, *Cetorhinus maximus,* taken on the New Jersey coast near Long Branch, an account of which appeared in SCIENCE of October 3, 1930. We were interested not because of the strangeness of such a catch, but because so much space was given to an animal which is so common with us that we may see one almost any day during December and January.

Twenty-one of these sharks were sold to the Monterey Fish By-Products Plant, of Seaside, Monterey County, California, between the dates of November 22, 1930, and February 13, 1931, the average weight being 2,523 pounds. The largest was 6,580 pounds and 28 feet long, the smallest 900 pounds and 15 feet long. The largest shark sold to the above firm at any time was a few inches under thirty feet and weighed 8,600 pounds. The liver of this shark weighed 1,800 pounds, 60 per cent. of which was oil.

Because this fish feeds directly upon plankton, the oil is clear, odorless and tasteless when carefully prepared; and, in the writer's home, has been substituted for commercial cod-liver oil purchased at drug stores.

Little is known regarding the migrations of this shark on the Pacific Coast; in fact, little is known about it at all. It is a cold water form (which would be obvious because of its use of plankton for food), but it has been seen in numbers at different times of the year as far south as San Simeon Bay, California, and there are records of its having been taken at both San Pedro and San Diego. A 2,000 pound specimen was taken here at Monterey Bay, May 19, last year; and another, 26 feet long, 6,200 pounds, September, 1928; so apparently they occur all the year, but are most plentiful during December and January.

The reasons more of these sharks are not taken are that the price paid fishermen is only $2.50 per ton, and the animals are so difficult to handle that fishing crews do not feel justified in equipping their boats for taking them.

They are now used entirely for fertilizer or chicken feed, the liver oil being used in the preparation of the latter. No doubt *Cetorhinus* will be taken in increasing numbers when the real value of the oil is appreciated as a substitute for cod-liver oil.

Two parasite copepods, *Anthosoma crassum* and *Denemature producta,* were taken from the 6,200 pound specimen.

G. E. MACGINITIE

HOPKINS MARINE STATION

COLOR

SOME philosophers have discussed the question whether color is exclusively a mental phenomenon or whether it resides in a colored object. In the temporary exhibit of color organized by Dr. I. H. Godlove at the Museum of Science and Industry, New York City, there was exhibited a diagram which should help us to a better understanding of this problem.

The diagram has a red block in the center, a source of light on one side and the eye of an observer on the other. This shows that color, as connected with some definite object, is a complex phenomenon consisting of three elements. If any one of the three is missing there is no color. We have no right to say that the color resides exclusively in the mind, the object or the source of light.

We may well carry the analysis much further and distinguish the following items:

(1) A periodicity in the motion of electrons, atoms and molecules in the source of light. That we may have a red color this periodicity must vary within narrow limits on both sides of 500 000 000 000 000 periods a second.

(2) The passage of this periodicity from the source of light to the object in such a manner that the number of periods a second is accurately conserved, but with wave lengths and velocity dependent on whether it passes through a vacuum, air, water or some other transparent medium.

(3) If the source of light produces other colors than red, the object must absorb these and contain molecules which will respond to the periods of red light and send out in all directions light having only that periodicity.

(4) The passage of this selected periodicity to the eye.

(5) A change in the velocity of light as it passes into the eye of such a character that the light is brought to a focus on the retina.

W. A. NOYES