the disease. Thus, once for all, he settled the question that the cause of cancer may be something separable and independent of the tumor cell, a matter which had been denied for allcancers by many research workers who said that the tumor cell is the only parasite. Dr. Rous was never able to isolate, cultivate, or see the cause of this tumor in spite of prolonged and diligent search.

"What Dr. Gye and his colleague,Dr. Barnard have done is to cultivate this organism through a whole series of tubes, to see it under especially constructed microscopes quite different from the microscopes in ordinary use, and to photograph it.

"The organism is a very peculiar body unlike any ordinary bacteria, and it seems to me problematic where it belongs in the natural classification of organisms. It is like the pleuro-pneumonia germ."

As to the general bearing of this discovery on the whole subject of cancer, Dr. Smith points out that nothing is yet known as to the cause of the human cancer aside from the fact that very frequently, if not always, it appears in irritated places; and if on its first appearance, it is removed by the surgeon, it may never return, whereas, if operation is neglected, the help of the surgeon comes usually too late.

"A few years ago nothing also was known as to the cause of malignant tumors in the lower animals," he continued. "But now we know of three tumors of the lower animals closely associated with parasites. One is a chicken tumor and two are in rats.

"In both of these rat tumors a worm appears tobe the cause of the disease. Rats may be 100 per cent. susceptible to either tumor and no tumor results unless the worms are fed tothe rats.

"There are other experimental cancers apparently due to the application of certain chemical substances to the surface of animals. These are due to tar, arsenic, aniline and similar substances. Such canders occur naturally in men and have beenproduced repeatedly in recent years in experimental animals. Only a portion of the animals become cancerous, although all are irritated by the applications, and not the whole irritated area in every animal becomes cancerous, but only tiny portions of it here and there. The question is raised whether the irritation is the direct cause, or whether it only paves the way for an organism.

"It is possible to conceive that some stimulus might so disarrange the chromosomes or other substances in certain cells so that all their descendants would be abnormal and destructive to other portions of the body. This is one hypothesis. The other is that a parasite must be closely associated with the tumor in all its forms and stages, otherwise the growth comes again under the physiological control of the body."

NEW TIDE GAUGE WILL AID GOVERNMENT SCIENTISTS

Scientists of the United States Coast and Geodetic Survey at Washington are enthusiastic over a new type of gauge for recording movements of the tides, which has just been developed.

"For some time," said Commander G.T.Rude, chief of the division of tides and

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currents, "the need has been felt for a tide gauge more portable and more easily installed than the large standard model, for which an elaborate platform is necessary. The new type, which is only 11 by 10 and a half inches on the base and 11 inches high, is expected to fill this need. It will aid us in obtaining tidal observations covering short periods of time."

MANY GOOD SEA FOODS NOW NEGLECTED

Many forms of sea food now considered of scant value have great possibilities and in view of the depletion of supplies of shad, sturgeon, salmon, lobsters, crabs, and other forms that are now used, the neglected ones may come into importance, according to Lewis Radcliffe, deputy commissioner of fisheries, of the U.S. Department of Commerce.

"An examination of our fishery statistics reveals the absence of some sea foods and a very small catch of others which reach a considerable magnitude in the fisheries of European countries," he says.

"For example, the 1924 landings by fishing vessels in Great Britain include over 6,000,000 pounds of anglers or monk fish, valued at $230,000. Our Atlantic coast fishermen annually throw overboard about 10,000,000 pounds of this fish which has a higher nutritive value than the "sacred" cod. There were also landed in Great Britain 20,000,000 pounds of cockles, valued at $200,000; nearly 23,000,000 pounds of mussels, valued at $130,000; 77,000,000 pounds of sharks, skates and rays valued at $3,657,000, and 5,300,000 pounds of periwinkles and whelks valued at $100,000. The aggregate of the products listed exceeds 65,000 tons. Although in many of our waters, these products abound, the volume used for food is comparatively small and is consumed chiefly by those of foreigh birth."

LARGE HEALTHY NEW DEWBERRY INTRODUCED TO PUBLIC

A dewberry that is larger and more resistant to disease than the ordinary berry now grown in gardens has been rediscovered and made available to the public through the efforts of U.S. Department of Agriculture horticulturists. This is the Young dewberry, a new hybrid variety which is wine colored, somewhat darker than the Loganberry, but sweeter than this favorite of the Pacific coast region. The new berry is suited for culture south of the Mason and Dixon line and west of Texas and Arkansas, and it should prove especially satisfactory in the South.

This new fruit owes its origin to B.M. Young, an electrical engineer, who lives in Louisiana. As a hobby he indulged in plant breeding and produced the superior Young dewberry by a hand cross between the Phenomenal and Mayes varieties. The new berry was thus created in 1905. It was not destined to take its place in the world at once, for Mr. Young was so busy in following his profession that his creation was nearly lost when the original plants were destroyed. However, he gave some plants to a friend who moved to Pennsylvania. This friend sent some to the U.S. Department of Agriculture and to a sister living in Alabama and it was in her garden and in the Department's grounds that the superior fruit was rediscovered only two years ago. So important did government officials consider the size and disease-resistant properties of the berry, that they sent George M. Darrow, horticultural expert, to examine all plantings of it. Sufficient stock of the new fruit has been propagated to release the new variety to the public through nurseries. It is believed that there is a possibility that the Young dewberry may even replace the Loganberry on the Pacific coast.