

By using the same type as the above mentioned vessels, the largest fishing unit in Spain, *Pescanova I*, will put to sea in 1963. She was the old Spanish liner *Habana* of 16,000 tons and is being transformed in Galician shipyards into a factory and mother ship. She will have an auxiliary fleet of 10 "combination" vessels, able to trawl, seine and fish with long-line. It is believed she will be able to make three voyages per year to south Atlantic fishing grounds and bring back on each voyage 4,500 tons of frozen fish—in the round and filleted—and 3,000 of fish meal and other products.

### The Outlook for Europe

The creation of a power to catch fish in such quantities, destined to operate in seas richer in fish than the north Atlantic, introduces an important change in the European fishing system.

From now on Europe will have an additional source of supply which will not diminish by over fishing for many years to come. The fishing grounds of the southern seas are now open to the north, they had hardly been exploited

for many centuries and will contribute generously to the world's requirements.

It seems that the high content of phosphorous and nitrogen in these waters (recently revealed by surveys of the "Geophysical International Year") ensures a high primary productivity. This basic richness was well proved in the Pacific with its high production of shellfish, tunny, etc., but now it is the south Atlantic's turn.

Though this comes rather late for us, it should be received with hope. Japan and Russia began the re-discovery but to maintain their effort on a large scale their bases are not placed as favourably as those of western Europe.

#### REFERENCES

1. FAO Yearbook Fishery Statistics. Vol. XII, 1960, Rome.
2. "Industrias Pesqueras," Nos. 817 and 818. Yearly issue, 1961 Statistics, 1962.
3. V. Angelescu, F.S., Gnery y A. Nani: "La Merluza del Mar Argentino" Secretaría de Marina, Buenos Aires, 1958.
4. Guillermo Mann F.: "Peces de Chile," Ministerio de Agricultura, Santiago, 1950.

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# OYSTER CULTURE IN MOROCCO

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ALTHOUGH not yet widely known among the population, the edible oyster is no stranger to Morocco. In 1931 Professor Gruvel mentioned a sales volume of more than five million of these bivalves and suggested an attempt with the culture of oysters in lagoons on the Atlantic coast.

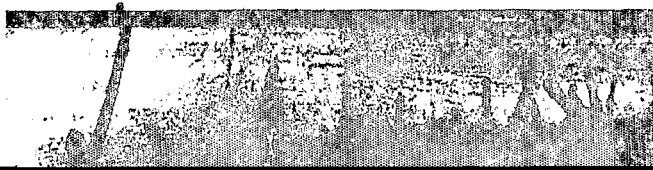
At that time oysters were imported from France and Portugal and, in order to create an equilibrium between the irregularities of importations and sales, all that could be done was to keep a certain stock in carefully prepared beds on the coastal rocks. An oyster culture in the proper sense was, however, non-existent.

### Oyster Beds at Larache

An oyster culture of the European type on the Moroccan coast seemed a hazardous enterprise in view of the

geographic situation of Morocco, far south of the normal occurrence of the two species of the usual cultures, *Ostrea edulis* and *Crassostrea angulata*. However, on several spots along the coast, in particular in a lagoon north of Rabat, at Moulay Bou-Selham, shells of dead oysters had been found, and later even living oysters of the "Portuguese" kind were discovered near Larache, in the estuary of the Loukos river, about 100 km. south of Cape Spartel. The search for the main oyster bed on the coast, begun in 1956, was only successful in 1959.

Natural oyster beds of Larache consist of isolated spots, restricted to sporadic outcrops of bedrock on the otherwise sandy and muddy riverbed, stretching from just above the mouth of the river to two/three kilometres upstream. Although every outcrop of the bedrock is covered by oysters, as a whole these beds are too spotty



faster than in Europe, yielding in only one and a half years oysters of all sizes fit for consumption, whereas in France this takes three years. This rapid growth is probably due to:

(1) Oyster density per square metre on the culches is much smaller than that in European fields.