

### XIII.—THE NORWEGIAN LOBSTER-FISHERY AND ITS HISTORY.\*

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As is well known, of all fisheries those on the coasts of Norway are the largest, and a great portion of the population of our extended coast is dependent on them for their living. But while all the other great fisheries on the coast of Norway have been carried on from time immemorial, their origin being so much enveloped in obscurity that our ancestors supposed that the gods themselves had taught men fishing, the lobster-fishery, which in our days is of such great importance, has originated in a later historical time, and has since developed, till it is now more extensive than all the other known lobster-fisheries, and supplies not only Norway, but also the neighboring countries. Although we will see, as I shall show later, that the lobster has been known in Norway even in olden times, it had during the Middle Ages scarcely ever been used as an article of food in the northern countries. Lobster-fisheries are not spoken of in the Sagas or in the Old Laws; and even now, although the lobster has been caught on our coast for several centuries, it is but rarely, if ever, eaten by our fishermen, and only the higher classes seem to like its flavor.

The scientific name of the lobster is *Homarus gammarus* Linn., from the Latin name *gammarus*, which again comes from the Greek word *γαμμαρος*. The Italians call it *Gambare di mare*, and the Spaniards *Crabujo*, both of which names evidently come from the Latin. The Illyrians call it *Caranthola*. It does not seem certain whether the Norwegian and German name *Hummer* and the French name *Homar* can be derived from *gammarus*, as our name is very old, and may have its root in the Old Norse verb *homa*, which means to go backward. The English name *lobster* is only a modification of the name *longusta*, applied to a closely-related genus, which is specially found in the Mediterranean; and the Dutch name *Zeekruft* simply means a sea-crawfish. In our Sagas, especially in their poetical portions, it is often mentioned. In Snorre's *Edda*, in the song *Skáldskaparmál*, (chapter 75 of the Copenhagen edition,) it is mentioned among fish and other marine animals. In *Olaf den Helliges Saga*, it is mentioned in a song of Björn Heldölekæmpe, where the sea is poetically described as "the paths of the lobster." In a similar poetical sense, the word is used in *Olaf Trygvesens Saga*, chapter 88, by the Skjald Thord Kolbeinsson, where he says that "the wave-

\* Om det norske Hummerfiske og dets Historie. Af Axel Boeck: in "Tidsskrift for Fiskeri," 3die Aargangs, Kjøbenhavn, pp. 28-43, 1863; pp. 145-189, 1869.

horses run over the fields of the lobster," meaning the ships that sail on the waves of the sea. In a song by Snigly Holle, in Harald Haardraa-des Saga, chapter 105, the expression "to be at the bottom with the lobster" is used for drowning. In the Selkolle Songs of Einar Gilson, in Bishop Gudmunds Saga, the term "the light of the lobster," equivalent to the fire of the sea, or gold, is used. In the same place, the expression "the horse of the lobster mountain," meaning the ship, is used. Finally, there is found in the poem Liknar-braut, the expression "land lobster," meaning a serpent or dragon.

The lobster belongs to the class of crustaceans, and among them to the highest section, the so-called order of decapods, which embrace short-tailed (brachyura) and long-tailed (macrura) species. The lobster has a great similarity to the common crawfish, (*Astacus fluviatilis*), living in brooks and small rivers, but is distinguished from it by having the last segment of the thorax united with the preceding one, while in *Astacus* it is separate. It was therefore considered by Milne-Edwards to be the type of a new genus *Homarus*. Of this genus, the representatives of which live exclusively in the sea, three species are known, viz: *Homarus americanus* Say, *i. e.*, the American lobster, which is considerably larger than our common lobster, and is found on the coasts of North America. From this the European *Homarus gammarus* is only distinguished by having a narrower spine on its forehead, and teeth only on its upper margin, while the former species has also teeth on the lower margin. There is finally the little *Homarus capensis*, from the Cape of Good Hope, which is not more than five inches long. The European lobster seems to have its central location on the southwestern coast of Norway, and goes as far north as Finmarken, where, according to Lem, in his description of the Finmarken Laplanders, 1767, it is found north of Traenen, where he ate very fine ones on the island of Rödö, while formerly their northern limit was thought to be the island of Bröndö, but he also thinks that they would be found in Finmarken, if people only searched for them. It is very rarely found on the coasts of Iceland, where, according to Mohr's "Islandske Naturhistorie," it has been found by Dr. Poulsen in Gröndevig, but it does not extend to Greenland or Spitzbergen. It does not go into the Baltic, but is found all over the Kattegat, especially near Anholt, Hirsholmene, Laesö, and Hjelm, and, according to Mr. Fiedler's report, in the Great Belt as far as Sprogö. On the coast of Bohuslen it is very common, and is said to go into the Sound as far as the island of Hveen. On the west coast of Jutland, it is found wherever the bottom is stony, and it is very common near Heligoland. It rarely goes into the inlets on our western coasts, chiefly on account of their great depth. It is very rare in the inner portion of the Bay of Christiania, and not very common in the Limfjord. On the coasts of England, Scotland, and Ireland, it is common wherever there is a rocky bottom, especially near Montrose, Orkney, Lewis, and Harris Island, and on the southern coast of England,

near Land's-end and the Scilly Islands. Near the Channel Islands, it is common, as well as near several groups of islands on the French coast. In the Mediterranean, it is not so common, although it is not entirely wanting; but its substitute as an article of food is another large species of crawfish, the *Langusta* (*Palinurus*). It is therefore not spread over a very large extent of sea; but it is found in its central locations in very large numbers, and there becomes an important article of food and trade.

Its general size is 8 to 10 inches from the point of the spine on the forehead to the tip end of the tail.\* It rarely exceeds this size where large fisheries are carried on; but now and then specimens of a much greater size are found in places from which none are exported, and where it consequently has time to grow before it is caught. Thus, Pontoppidan, in his "Norges naturlige Historie," part ii, p. 279, says that the very large lobsters are called "Størjer," and that near Utvaer, on the Bay of Evien, a lobster had been seen which was so large and ugly that nobody dared to attack it, and that it measured a full fathom between the claws. This seems certainly to be somewhat exaggerated; but I myself have seen the claw of one which must have been about 18 inches long. Sir John Graham Dalyell says, in his work "The Powers of the Creator," 1827, that he had seen a joint of the left claw of a lobster that measured 9 inches in length. According to this, the whole claw must have measured 18 to 24 inches, and the whole animal 3 to 4 feet. As a general rule, those that are taken in the fiords are larger than those which are caught near the islands toward the sea. The color of the animal when alive is generally a blackish green, with several blue spots; but it may also be lighter, especially near the mouths of fiords, while farther out toward the sea it becomes much darker. I may mention as a curiosity that during this year (1868) I found a lobster near Hauge-sund, one-half of which was of a greenish black and the other of a light orange color, there being a sharp and clearly-defined dividing line, which ran lengthwise, and divided the lobster in two halves of equal size.

The lobster lives close to the coast, where there is a rocky bottom, among the large algæ; but in winter, when the water grows cooler, it descends as far down as 16 to 20 fathoms, while in spring, when the temperature of the sea rises, it stays at a depth of from 1 to 4 fathoms. It is altogether a coast-animal, which very rarely seems to go any distance from its birth-place, if it can readily find there a sufficient supply of food. Sometimes, however, they have been seen in large masses swimming toward the land from the sea, and they have then been caught in nets, having been mistaken for a school of herrings; but this is only a consequence of local migrations, when it goes from the deeper into the shallower waters. It is not able to make its way through the

\* In the Kattogat, on the eastern coast of Jutland, it reaches a larger size than on the western coast, generally 10 inches.—*Ed.*

sea for any length of time by swimming. Its structure certainly allows it to make quick and definite movements, and it can swim freely about in the sea, but this swimming never lasts long, as it cannot keep itself afloat very long. Neither is it able, while swimming, to catch and swallow its food; but it seizes its prey only when it can hold on to something. At the bottom of the sea it can chase its prey, if necessary, with great rapidity, but while eating it remains quite still. The lobster is a very greedy animal, and can swallow great quantities of food, which it seems to find especially during the night by its scent, while during the day it keeps quiet and digests. Its food consists chiefly of the roe of fish and of dead fish, but likewise of small crustaceans and other marine animals. When kept in confinement, it can live for a considerable time without food. The lobster seems to be able to propagate when it is a little more than 6 inches long, (at least, roe is only found in animals of this size;) but when the lobster reaches a length of 8 inches it contains a great quantity of roe. A real act of copulation takes place, the male lobster placing its double male member into the outer genital opening of the female; and the eggs are impregnated while they are yet in the ovary. This pairing seems to take place from autumn to spring or March and April, for it is highly probable that the roe is emitted from the ovaries immediately after the copulation has taken place, just as with other crustaceans; and the emitted roe is found entirely during winter. After impregnation, the eggs are emitted from the outer genital openings of the female, which are found at the bases of the third pair of feet, but do not fall into the water, as they are held in a hollow which is formed by the bent tail, which, both at the end and on the sides, has leaf-shaped fringes that inclose the space formed by the bending of the tail. Under this tail, there is fastened a double row of the so-called tail-feet, to which the eggs are strung by strong slimy strings. The embryo now begins to develop in these eggs, which are quite numerous, 2,000 to 3,000 in one female, according to the size, and occasionally as many as 10,000 to 12,000. The formation of the embryo does not, however, seem to begin till the temperature of the water has become milder in spring, even if the pairing should have taken place in autumn or winter; for, although loose roe is often found in winter, it is never seen in any degree developed into an embryo. This pairing and the development of the roe seem to take place at different times on the different portions of the coast; for the fishermen themselves, who have such an excellent opportunity of observing them, are not agreed as to the actual time. The development of the embryo seems to take at least fourteen days from the time of commencement, and it can easily be observed till the young break the shells of the eggs and begin to lead an independent life. When the young lobster comes out of the egg, it measures only a few lines in length, and does not at all resemble the old lobster, but has a different structure. It does not leave the hollow under its mother's tail immediately after being hatched,

but lives there for some time, and later frequently returns to it. It is particularly distinguished by a less complete development of its feelers and tail-feet, and by the feet being exceedingly small but furnished with long brush-like branches, with which it swims vigorously on the surface of the water. After having spent some time in this state, it changes its skin several times and assumes the shape of its mother, when it goes to the bottom. Its life from this moment till it reaches a size of 5 to 6 inches is entirely unknown; for no young lobsters have been caught, either by fishermen or scientists,\* the smallest having been found in the stomach of the torsk, so that it is probable that they spend this portion of their life at a greater depth and live in a different manner and on other food than at a later period. There can, therefore, not be any artificial hatching of lobsters in the sense of artificial fish-hatching, but all that can be done is to keep the lobster imprisoned during the development of the eggs, and thus protect it from the dangers which threaten it and its young. It is impossible to do anything for the tender young, as they die very soon when confined. I see, however, that several persons in France, and Mr. von Eris, in the lagoons of Triest, near Grado, have hatched several millions of young lobsters by keeping lobsters with ripe roe at the bottom of the sea in perforated boxes.

After the lobster has emitted its roe, and the young have left the mother, she begins to shed. She, therefore, goes to safe places, and does not seem to care much for food, while the old skin is being loosened; the shell finally opens in the back, and the animal goes into the water naked. It then looks as if it was covered with velvet, on account of the considerable formation of cells which is going on all over its surface. These cells afterward grow hard through small particles of lime and form the new shell. This shedding of the shell goes on from the middle of July till September, but not at the same time all along the coast, being earlier in the southern and later in the northern part. The lobster thus gets sick, as it is called, toward the end of June near Sogndal, and the export must then cease, as the mortality among them becomes too great, while near Karmö it is still in a healthy condition till July 15. Farther north, the shedding of the shell begins still later, and lobster may be caught all through July.

The greatest enemy of the lobster, and who sensibly diminishes its numbers, is man. When swimming near the surface during its youth, with a number of other small crustaceans, it becomes a welcome prey to the herring and the mackerel. As the grown lobster keeps at no great depth, and where large fish of prey are not commonly found, it is not much exposed to them, but occasionally, when lying near the surface, it is taken by large birds of prey. An interesting scene may be witnessed near Bukkenö, north of Stavanger, where an Englishman has construct-

\* The development of the lobster has, since the original publication of this memoir, been studied by Mr. S. I. Smith, of Yale College, and Prof. Japetus Steenstrup, of Copenhagen.—Ed.

ed a large pond, between some small islands, for keeping live lobsters. Whenever the pond becomes too full of lobsters, so that they do not find sufficient food, they leave the water, and crawl about seeking to reach the sea; but during their wanderings they fall an easy prey to large numbers of crows hovering round, which take them in their claws, fly high up, and let the unfortunate lobster drop down on the rocks, where their shells are broken, so that the crows can eat them in comfort. The crows are not easily scared away, but show a remarkable degree of sense, only flying away when any one approaches with fire-arms, and later they carry on their depredations in the early morning, when they have less to fear.

#### IMPLEMENTS FOR CATCHING THE LOBSTERS, METHODS OF CATCHING THEM, AND THE MANNER OF SHIPPING THEM.

Formerly, the lobster was caught on our sea-coasts exclusively with tongs. These tongs were made of wood, and had about the same shape as the common oyster-poles, being only somewhat longer, generally two fathoms. Such an implement was exhibited at the Bergen Exposition of 1865, and an illustration of it is given in the report. As these tongs were not very long, lobsters could not be caught at any great depth—only at a depth of little more than a fathom—and this sort of fishing was carried on during the early morning hours. But as lobsters taken with these tongs often got hurt, and died two to three days afterward, because they cannot stand any pressure, this implement was not suited for those that were to be exported; and the Dutch, after the peace of Westphalia, when the lobster-fisheries began to assume larger dimensions, endeavored to induce the fishermen to use other and better implements. Although baskets, through the influence of the Dutch, had thus become common in the neighborhood of Stavanger since 1717, tongs have been frequently used even in our century, and are perhaps in some places used to this day. *Kryger*, in his report on *Ous*, in the "*Budstikken*" (a periodical) for 1820, mentions that lobsters were caught there with tongs for home-consumption. Farther north, tongs seem to have been the common implements for catching lobsters at a much later period; for, in the quinquennial report of the governor of the Romsdal district for 1840-'44, it is said that "lobsters are taken with tongs, baskets not being thought to answer the purpose." Lobsters were caught with tongs by small boys from ten to fourteen years of age, early in the morning, in calm weather, and, if successful, one night might yield an income of \$2.25. Another very simple implement for catching lobsters is spoken of in the "*Budstikken*" by Ström, who says that lobsters are taken with a hook fastened to a pole, which hook is inserted in the belly, the softest part of the lobster. With this instrument, it cannot be taken at any great depth, and only when the sea is calm so that the bottom can be seen. Lobsters caught in this manner cannot be exported, as they could not stand the journey. The imple-

ments which I am going to at once describe, and which have almost entirely supplanted the simpler ones, are used by enticing the lobster with bait into a trap, out of which it cannot escape. The simplest of these traps is seldom used with us, although, according to *Oetker*, it seems to be in common use near Heligoland. It consists of a very thick iron ring, to which a net is fastened, so as to form a deep bag below. The bait is placed at the bottom of the bag, and it is lowered and taken up by means of a long line, which, when the bag is at the bottom, reaches up to the surface. To this line, a piece of wood is fastened, which floats on the water, and shows the location of the trap. If this instrument has been lying at the bottom for half an hour in a place where lobsters are known to abound, a sudden jerk is given to the line, so as to cause the lobster to fall in the bag, and it is rapidly pulled up. (The most successful time of the day for catching lobsters is generally in the morning or also between 11.30 a. m. and 3.30 p. m. With this instrument, which the English call "plumpers," and the Germans "Fallenkörper," lobsters are taken in deep places.) With us the commonest implements for catching lobsters are baskets ("*Tejner*"). It seems certain that the Dutch first introduced them for catching lobsters; but they may have been used long before that, *e. g.*, for eels, as the name is Scandinavian, and is derived from "*tün*," *i. e.*, the long and tough roots of the juniper-tree. After 1713, a beginning was made in plaiting them of willow-branches. Where these materials could not be readily obtained, they were, as Pontoppidan related in 1753, made of hoops, which were kept apart by chips of wood. All round these, nets are fastened, and at each end there is a long, narrow, trough-shaped entrance, out of which the lobster cannot escape. On the one side, there is a trap-door, which can be closed with a peg, and to another pin sticking in the basket the bait is fastened, while under the basket there are large stones to make it sink rapidly. To one of the uppermost chips of wood, a pair of tongs is fastened, furnished at the end with a piece of wood to indicate the location of the basket. Such are still in common use all along our coast. Still earlier, in 1746, the famous naturalist, Carl Linné, described similar baskets, which he saw in use on the coast of Bohuslen, in his "*West-Göta Resa*," p. 191. These were two yards long, one yard broad, and one yard high, resembling a half-cylinder, with entrances on both sides; such are still used and could be seen at the Bergen Exposition. At this same exposition, a basket was exhibited, differing somewhat from these in its shape; it was plaited of branches, and was shaped like a hemisphere, with an entrance at the top. An illustration of this basket is given in the report on the exposition.

Lobster-fishing is carried on at different seasons on different parts of the coast of Norway. It generally begins in spring, but in some places, *e. g.*, near Christianssand, it continues all winter. Farther south the spring fisheries begin earlier; thus, on the coast from Sireaa to Jædder in the middle or toward the end of March, as the lobsters then begin to go

into shallower waters. From Karmö to Espevær, the fisheries begin in April, and farther north, near Strandsund, in the beginning of May. Near the Jædder, which is farther south, but where the coast is not so flat and convenient, the fisheries commence much later. The fisheries are continued through the following months, but cease in the first-mentioned district in the middle or toward the end of June, while in the others, near Stavanger and the Southern Bergen district, they are continued till the middle of June, and farther north till the first of August. When the fisheries are to commence, the fishermen go to the outer islands near the open sea, where the fisheries are richest, and live in sheds built for the purpose, during the whole week from Monday on, returning with the lobsters on Saturday, fishing thus going on for five days each week. Two men generally club together and have thirty to fifty baskets. In the evening, the baskets are furnished with bait, consisting of all sorts of fish except herring and mackerel; for they claim to have noticed that lobsters caught with bait of the last-mentioned kind do not live long. The baskets are then placed in the sea at a depth varying from 16 to 2 fathoms, according to the season of the year, and taken out before sunrise. The baskets can also be put in position when the tide comes in, and be taken up when it goes out. As soon as the lobster is taken from the basket, its claws are tied together with strong twine, and it is placed either into a box perforated with many holes, or into a larger basket, which is then sunk in the water near the coast. Here the lobsters remain till Saturday morning, when they are taken out and brought to the dealers, from whom the fishermen immediately receive their pay. Every lobster which measures more than 8 inches from the spine on its forehead to the tip end of its tail, and whose claws are perfect, is called a "full man;" but if it measures somewhat less, or if portions of its claws are missing, it is called "half a man," and only fetches half the price of the others. The dealers, who collect the lobsters on the coast, pack them in large boats that can hold as many as 2,000, cover them up with sea-weeds to protect them against the sun, and send them to the chief depot, where they are immediately placed in special boxes. These boxes differ somewhat among themselves; the best are about 3 yards long, 2½ yards broad, and 18 inches high, and perforated by numerous holes, so as to constantly admit fresh water. These boxes hold about 400 lobsters each. Formerly, they were not so high, but then the mortality among them was greater, especially in bad weather, when the rain adulterated the water in the box. In other places, these boxes are perfectly square, measuring four yards each way, and hold about 500 to 800 lobsters. After the lobsters have arrived at the chief depot, they must always rest for some hours in the box, before they are placed on board the vessels, as they are sick from the long voyage in open boats without water. Every Saturday, an English lobster-vessel comes to the depot, begins to take its cargo in the evening, and gets through with this Sunday afternoon, whereupon it immediately



goes out to sea. In this manner, the fishery has been arranged for more than one hundred and fifty years, as it seems, by the Dutch, of which more will be said under the history of the fishery. Nowadays, the fishermen receive a far higher price for their lobsters than formerly, and as a general rule they get in Stavanger and Bergen from 4 to 4½ cents a piece, but farther north they are cheaper. Formerly, when the price in Stavanger was lower, about one-half cent extra was given for every lobster caught before the middle of May, but this custom has been abandoned. The dealers who receive the lobsters from the fishermen receive about 60 cents as box-money for every thousand, and 20 to 25 cents for every hundred they bring to the chief depot for every full mile they travel with them. The wholesale dealers receive the same box-money, but besides \$3 as weekly money. If they do not keep any boxes themselves, but receive them from the lobster-company, the retail dealers get \$3 for every thousand, and the wholesale dealers \$4.50 for every thousand, but, in that case, no week-money. When the lobster-vessels go to sea, they always go straight over to England, to Grimsby and Harwich, while formerly they went to London, anchoring near Greenwich in the evening, unloading the lobsters during the night, and taking them to London, where they arrived in the Billingsgate market before sunrise. Now the vessels, on arriving in one of the above-mentioned ports, go into the dock, which is specially intended for them, and the lobsters are unloaded into the fish-boxes belonging to the dock, which are rented out for one English shilling a day. These fish-boxes are shaped like a boat, are 11 yards long and 5 feet broad, but have a flat bottom. They are hoisted up so that the water runs off, and the lobsters are sent in suitable baskets by railroad to Billingsgate. Sometimes they are sorted in the ports, but this is mostly done in London. The largest lobsters are picked out, and twenty are always packed in a basket, which gets a black stroke as a mark. The smaller ones are packed forty in a basket, and get two strokes as a mark, while the smallest are packed sixty in a box, and get three strokes as a mark. The baskets with one stroke are more valuable than those with two and three, although these latter contain more lobsters. The wholesale dealers in the market get them from the railroad and sort them, and they then pass over to the fishmongers. These boil them, and send the finest to their best customers in the city and the country, while the small ones are sold in the city to cheap restaurants and private individuals.

In the Billingsgate market, the lobsters meet their brethren from the English, Scotch, and other coasts. From the south coast of England, they come by the Southwestern Railway, and by the Great Western from Bristol, to which ports they have come from Guernsey and Jersey, the Scilly Islands, and Land's-End. From Scotland, the Orkney Islands, and Lewis Island about 180,000 come every year, partly in steamers; from Ireland, they come by way of Liverpool; while a smaller number come from Sweden and Heligoland. All these are gathered in the

Billingsgate market, and are thence distributed from March to August. Not all are consumed in England, but a portion are again sent away, especially to France.

I have mentioned that the coast is divided into certain districts, and that in these there are certain stations for the retail and wholesale dealers, from which the lobsters are shipped, and where the government custom-house officers are stationed, as great facilities are afforded to this trade in the way of customs, &c., of which I shall speak more under the history of the fisheries. Of these districts, the first, the most easterly one, extends from Faerder to Mardö, but from this district none are at present exported to England. The same is partly the case in the second district, which extends from Mardö to Cape Lindesnaes, although some are placed dry in boxes and sent by steamer to London and Hamburg. In this manner, lobsters are also shipped from the next district, which extends from Cape Lindesnaes to Snaekken, the chief place from which they are exported in this district being Kirkehavn. The lobsters are placed in the boxes in several layers, the tail being bent under the stomach. The boxes are then closed, and the lobsters keep alive for a considerable time. Formerly, they were from these districts also exported in barrels; but this was discontinued twenty years ago. The next district extends from Stavanger, near the river Sire to Vig.

[A following half-page defines the exact location of the different districts.—TRANSL.]

Nearly all the lobsters which are shipped from Norway are sent alive. Pontoppidan relates that in his time—the middle of the last century—some were salted just before being shipped, but this custom seems to have been subsequently abandoned, as so many lobsters died during the voyage. In this century, Mr. Jacob Mörch, a Christiania merchant, tried the plan of putting them up in hermetically-closed receptacles; but as all those which had been put up by him in this manner did not get the red color of the fresh boiled lobsters, and therefore were not liked so well, he took out a patent in 1840 for putting them up in such a manner as to keep their beautiful red color. He dipped them in boiling water containing salt till they got this color, and then made an incision in the soft part under the tail, thus letting the water which injured them flow off, and then placed them in hermetically-sealed vessels. Very few lobsters put up in this manner, however, seem to have been exported, and nothing more has been heard about it.

#### THE LOBSTER-TRADE AND THE HISTORY OF ITS LEGISLATION.

Although the lobster had been known to our ancestors from time immemorial, it was, as has been said above, but little used as an article of food, and foreigners have taught us to like its flavor. In Holland, the lobster seems to have been highly prized, even in olden times; and when their lobster-fisheries were no longer able to supply the demand, the

Dutch began to visit Norway as early as the seventeenth century, but it seems that lobsters were not exported in any considerable quantity till the middle of the century, especially from Flækkefiord and from Karmö. The citizens of Zierikzee in Holland commenced this trade, and for a long time carried it on exclusively. We read that lobsters were exported from Flækkefiord in 1660. In 1674, that port was visited by ten lobster-ships, and, in 1676, Hitterö near Flækkefiord, and Egvaag near Farsund, became the chief stations in the districts of Lister and Mandal. From 1690 thenceforward the Zierikzee boats visited Karmö regularly, Skutesnæs and Buken being the first lobster-ports in that district. The Dutch were so eager to further these fisheries that they gave presents to the clergymen, consisting of cheese and cakes, and thereby induced them to exhort the peasants in front of the church to catch and sell lobsters. This succeeded so well near Lister that I find that a man on July 7, 1699, had his ground solemnly consecrated so as to prevent other people from catching lobsters there. The clergymen at Karmö received presents till 1730, when the Dutch found that it had become an unnecessary expense, the lobster-fisheries being by that time in a very flourishing condition. Till 1713, however, these fisheries were not carried on to any very great extent, as wars hindered the fishermen from following their occupation and made the export uncertain. People therefore contented themselves with catching lobsters with tongs; but, after the peace of Utrecht in 1713, the export of lobsters was better regulated, and several ports were visited both in the Stavanger and in the South Bergen districts. Then people began to make baskets, which the Dutch were very anxious to introduce, as many of the lobsters caught with tongs died. The Dutch, therefore, gave to those fishermen who used baskets clay pipes, and twine to tie the claws of the lobster. By agreement, common customs and regulations for loading the ships had been adopted, so that the shipper who first came into port should be allowed to take his full load before any of the others could buy any. The price had also been fixed by the Dutch at about one cent for each lobster, ("full man,") and about fifteen cents for every one hundred lobsters brought alongside of the ship. In order to avoid competition among the buyers, every port had a certain district assigned to it from which it was supplied with lobsters, and every captain had a certain port to which his ship must go. As long as this trade was carried on exclusively by the citizens of Zierikzee, this agreement was kept up, and both buyers and sellers were contented. The following places were then gradually designated as lobster-ports: Mandal, Flækkefiord, Egersund, Tananger, or perhaps Stavanger, Akre on the island of Karmö, and Leervig on the island of Stordö. Outside of Lister, Stavanger, and the southern part of the Bergen district, it was not allowed to catch or sell lobsters on account of the strange belief prevalent among the fishermen that lobster-fishing would ruin the other fisheries. This can be seen from Governor Povel Juel's memorial of 1717, which is found in the royal archives, where we

read: "It is thought that the lobster-fisheries are very injurious to all the other important fisheries; for experienced fishermen say that fish mostly live where there are lobsters, and that they dive to the bottom to get the roe of the lobster. It is well known all along the coast that through lobster-fishing the cod and mackerel fisheries are neglected, and it is desirable that this fishery should be entirely abandoned."

This belief in the injuriousness of the lobster-fisheries seems to have been very common till the end of the last century; for, in "Versuch einer Naturgeschichte der Krabben und Krebse," by Herbst, 1797, it says "that many people think this trade is injurious to Norway, as the removal of large quantities of lobsters makes the fisheries leave the coast of Norway." Governor Holm, in his "*Forsög til Beskrivelse over Lister og Mandals Amter i Norge,*" likewise says: "It is difficult to say in how far lobster-fishing hinders the other fisheries, as many fishermen stoutly maintain. Lobster-fishing has been carried on, as now, in olden times, when the other fisheries were very considerable." The lobster-ships were to go to certain ports specially designated, and, on leaving these ports, were to pay a sum to the custom-house officers, who besides liked to take small presents, which abuse is complained of as early as 1717, as likewise that the citizens sold to the lobster-ships brandy and lumber, receiving in exchange various goods which paid no duty. The lobster-ships generally came twice a year from Holland, late in autumn and early in spring, and sailed along the coast to get their cargo in the ports designated for them. The English at that time received their lobsters from their own coasts, from the North American islands, and from Heligoland; 18,000 having been exported to England from the latter place in 1713, and 34,000 in 1714. But, as soon as the English demand grew larger, English ships occasionally came to Norwegian ports, and bought lobsters, paying a higher price than the Dutch. It seemed, also, as if, through the introduction of baskets in Lister and Karmö, by which lobsters were easier caught in greater numbers, and through the increased export during the years of peace after 1713, the quantity of lobsters had decreased, and the fishermen began to complain of the low price paid by the Dutch. In 1716, the fishermen of Lister addressed a memorial to Governor Povel Juel, saying "that they no longer could sell lobsters according to the old regulations at a cent apiece, because the fisheries decreased year by year, so that they had no reward for their trouble, danger, and expense, but only less profit in their farming, which had to be entirely neglected on account of these fisheries; they, therefore, had concluded to give up the above-mentioned fisheries entirely;" and, therefore, they petitioned him to forbid the lobster-buyers to visit the ports, or at least to raise the price to 2 cents apiece. The governor, who always seems to have taken a deep interest in the welfare of his district, consequently decreed, July 15, 1717, "partly in order to please the farmers, and partly the lobster-buyers, who would quickly get their cargo if all the men along the coast gave greater attention to the

fisheries, because they had the price raised, and had not to lie in port eating up their provisions," that the lobster-buyers who, after this date, came to the ports in his district "should pay 2 cents for every lobster, either living or dead, great or small, just as it might come; but, if it only had one claw, 1½ cents, and not give either a higher or a lower price. Any one acting contrary to this decree should pay a fine of about 30 cents for every lobster, half of which should go to the informer, and half to the sick poor of the parish; and the lobster which had been either bought or sold should be confiscated." The old customs, that the ship coming into port first should first take its full cargo, &c., should remain. He also induced the governor of Stavanger to issue the same decree in his district, but the governor of the South Bergen district would not do so. When the lobster-traders in Zierikzee heard of these regulations, they resolved to oppose them unaniously, and agreed in writing not to give more than one cent for each lobster, and also to send their ships on one and the same day to those places where they were accustomed to get their cargo, so as to prevent any of the shippers from abandoning the agreement entered into and paying more. They thought that if all the shippers were unanimous not to pay more, the poor fishermen would finally give in if they saw that the shippers made preparations for sailing and no one else was there to buy. Their commissioner in Stavanger, Lauritz Smith, made great exertions to induce the peasants to return to the old price, by traveling in person to Tananger, where he had great influence, and by urging the clergymen to induce their parishioners to sell at the old price, promising them some extra presents from the Dutch if they should prove successful in persuading the peasants. All the custom-house officers also assisted him, because they were afraid of losing their fees and small presents which they were in the habit of receiving from the Dutch. He was, however, only successful in one parish in the Tananger district, while in all the others and in the districts of Lister, Mandal, and Stavanger the peasants immovably stuck to their new price. In the Bergen district, the governor had issued no decrees, and Smith succeeded, with the assistance of the custom-house officers in Leervig, in furnishing the Dutch several cargoes at the old price. The wealthy peasants were the most eager to uphold the new price, forcing the poorer ones not to sell, so that all the exertions of the Dutch failed; the new price soon becoming universal everywhere, and prevailing till near the end of the century, but only for living lobsters measuring more than 8 inches in length, while for the smaller ones or those having only one claw only one cent was paid. Lauritz Smith also made complaints to the government in Copenhagen regarding Governor Juël's decrees, and as Juël was not in favor with the government, his decrees for the benefit of the peasants did not meet with its approval. In his report to the king, Smith complained very strongly that the governor had attempted to change old established customs which to all intents and purposes related to foreigners. The report

suggested that all the fisheries should be rented out for the benefit of the royal treasury. Governor Juel was that same year obliged to resign and could do no more in this matter. The thought of renting them out was again given up, as the new governor could not advise such a step; but sometime afterward the question began to be asked whether the country's own merchants might not derive some advantage from this trade, and whether they might not reap the great profit which had hitherto fallen to the share of the Dutch. The export of lobsters was quite considerable at this time, as the district of Bergen was annually visited by eight ships, and more than twenty took their cargoes in the districts of Lister, Manda, and Stavanger. There is no information as to the size of these ships, or how many lobsters they took, but each took a cargo twice a year; and even if they were not as large as those mentioned about the middle of the century which could hold 4,000 to 6,000 lobsters, the quantity of lobsters exported was, nevertheless, very considerable, and the Dutch traders must certainly have enjoyed a good income from this trade, as on every occasion they showed themselves so eager to retain it. As lobster-fishing had become much easier since the introduction of baskets, and more profitable through the higher price which the peasants got, the landed proprietors wanted to have the exclusive right to fish near their grounds and forbid all others to do so. This they thought could best be done by having their grounds solemnly consecrated. I find such a consecration of a farm near Lister, spoken of as early as 1689, but on the island of Karmö not till 1720. In some places, such a consecration was respected; while in others this was not the case, the people having an idea that fishing in the sea should be free to all. A law-suit in 1725 resulted in the confirmation of this ancient law of free fishing in the sea by a royal decree, which also affected the lobster-fisheries. David Halvorsen Vraa and Jacob Olsen Vidöen, of the village of Staengelund, on the island of Karmö, in 1725, brought a law-suit against some fishermen, who, in spite of the consecration of their ground, had placed some lobster-baskets near some small islands belonging to them. Judge Leth gave judgment on the 29th of August of the same year in favor of the plaintiffs, on the ground that the law, book 5, chapter 11, article 2, confirmed by book 3, chapter 13, article 1, gave the owners the right to use all the profits that might be derived from their property. After this judgment had been passed, all the owners of islands began to forbid the fishermen from catching lobsters not only on those portions of the coast that were very near to their farms, but also on islands that lay at a distance of three or four miles from the coast. The poor fishermen, who at certain seasons of the year lived entirely off the lobster-fisheries, saw themselves deprived of this means of making a living, and complained bitterly to the highest authorities, maintaining "that the lobster-fisheries have never before been forbidden them, and that now they were deprived of their only way of making a living;" they pointed out that the king's own sailors were especially hurt by this judgment. Through the

governor, their complaints were laid before the viceroy, Mr. Weber, who had the matter examined by competent men, and thereupon sent a memorial to the king, in which he says, among other things: "The blessings which the sea bestows will become useless, if the owner of the ground has the power to take and keep everything pertaining to the fisheries; fish are not in one place, but change from one to the other; and the fishermen, who alone understand the fisheries and earn their living thereby, must go after the fish. It is a general custom of the country, and also in accordance with the law, that every one takes the fish which the sea yields wherever he finds them, with the exception of the salmon, which always goes to certain places that pay a special tax, and where, therefore, none but the owner is allowed to fish. The law, book 5, chapter 11, article 11, says that no one must hinder another person in the fisheries he possesses from olden times, and article 2 of the same chapter, on which the judge has based his argument, says: 'Every man shall enjoy the water and the fisheries near his grounds which he has possessed from olden times, unless he has been deprived of these privileges by law;' and book 3, chapter 13, article 1, says: 'A nobleman and lauded proprietor is, more than any stranger, privileged to use all the advantages of his property.' Fierce law-suits would follow, if the owner of such islands could forbid the fishermen to catch lobsters, as the blessing of the sea would then remain useless, and the little that was derived from it would not be properly treated, since the fishermen alone have the greatest experience in this matter," &c. He therefore proposes to the king to revoke the judgment given by Judge Leth, and allow all and every one to fish lobsters. The result of this memorial was a royal decree, dated April 23, 1728, to the effect that lobster-fishing should be free to all.

After this decree had made the lobster-fisheries free, the export of lobsters, concerning whose decrease complaints had been made to the viceroy, rose again, so that in 1733 twenty-three large cargoes, containing 160,000 lobsters, went to Holland, and the rest to England in thirty-two small English and nine Norwegian vessels. The Stavanger fishermen had recently got six to eight lobster-vessels, after the question whether the advantages of the lobster-trade might not just as well be enjoyed by the king's own subjects as by the Dutch had been settled, and certain privileges had been granted to the home traders, decreeing "that in order not to let foreigners reap the chief profit, a Norwegian ship should be admitted into every port before anything should be sold to foreigners." English vessels likewise began from this time to visit the coasts of Norway in greater numbers; many of these had formerly taken their cargoes near Heligoland, and had left that region because the fisheries had decreased there. Several ports of export and custom-houses were established on account of the increased fisheries; six ports being alone established in the Stavanger districts. On account of the greater demand for lobsters, the fisheries were carried on to a great

extent, and complaints are made during the following years that the number of lobsters on the coast was decreasing. Count Rantzau, who was governor at the time, issued an order to his officers that they should make suggestions as to what should be done to prevent the decrease of this important fishery, which yielded so large an income to the king and the nation. Judge Lom, in Lister, in 1737 made a proposition that the fishermen should be forbidden to sell any lobsters measuring less than 9 to 10 inches in length, under a fine of about 60 cents for every smaller lobster which is sold; and as the lobster, as far as known to him, emits its roe toward the end of June, fishing should cease from June 24 till the end of February. This for those times very remarkable proposition was not supported by others, and was forgotten; more than one hundred years were to pass before the idea of protecting the lobster during the season when it spawns and sheds its shell was destined to become a reality, and a law passed concerning it. Peasants who had farms near the sea where lobsters were caught, believed that the decrease of these fisheries was chiefly caused by the freedom of fishing, and that the lobsters would finally be exterminated. There was consequently great dissatisfaction with the royal decree, which favored the small farmers at the expense of the great ones. They likewise thought that as consecrating the ground had, with few exceptions, always been respected, owners should also in the future be exclusively permitted to fish lobsters on their grounds, if these had been consecrated prior to the royal decree. Many government officials seemed to have shared this view, especially when the fisheries began to decrease very much and the peasants found it very difficult to pay their taxes. The judge, in his answer to Governor Rantzau's inquiry regarding the economical pressure, says expressly "that in assessing the taxes on each farm regard had been had to the lobster-fisheries, which have become exceedingly profitable, for which reason the Dutch and English lobster-vessels frequent our coast. In these regions, mackerel and other important fisheries have belonged to the farms lying near the sea; and as, in the district of Lister, these fisheries have been so entirely destroyed that the inhabitants have not had any use of them for many years, and had to lay aside their nets and seines, which they had bought at a great expense, they now have nothing else to fall back upon for earning a living and paying their taxes but the lobster-fisheries near their ground, since the quantity of grain and hay which they harvest is but very small, and agriculture is, in many places, connected with the greatest difficulties." He would, therefore, propose "that, in order to preserve the fisheries, land-owners may have the exclusive right of fishing on the coast near their grounds and around all those islands, which were formerly used for agriculture, as far as the deep water, but that all the remaining waters should be free to every one." He, therefore, wished to bring back the condition which existed before Judge Leth gave the two farmers mentioned above the exclusive right to fish lobsters near their grounds, which right all



land-owners, from foolish covetousness, exercised so far as to forbid the poor fishermen from catching lobsters on the outer coast as formerly, for which reason the royal decree also made lobster-fishing entirely free. The decree, however, remained in force, for the special reason that it favored the enrolled sailors, to assist whom was in the interest of the government.

The dissatisfaction with the existing state of affairs did not grow less in course of time; but every time that the political situation in Europe favored or did not prevent the lobster-trade, the land-owners endeavored to regain the exclusive right of fishing lobsters near their grounds. In the district of Flækkefiord, there were thus, in 1790, serious quarrels between the fishermen and the land-owners, who tried to prevent the fishermen from catching lobsters near their grounds, forbidding them to live on their islands, or to set their baskets and gather the lobsters. Mr. Schiønning, a custom-house officer, January 13, 1770, made a proposition to the board of trade, containing more definite regulations concerning the rights of both parties, in order to put an end to the quarrels between the fishermen and the land-owners. This proposition was sent to the governor, at that time Mr. Teiste, who quietly shelved it.

The Stavanger merchants, after the year 1730, had bought several lobster-vessels for shipping lobsters to Holland, because they now had a number of privileges with regard to the sale of lobsters. They could not, however, derive from it the profit they desired, as the Dutch sought in every way to hinder the sale of lobsters in Holland from Norwegian vessels. Several Stavanger merchants, therefore, again sold their vessels to the Dutch, and became Dutch commissioners; letting the trade, however, go on in their own name, so as to retain for their ships the privilege of first buyers. Complaints were made, and the Norwegian vessels seem somewhat later to have lost this privilege of the first buyer. The last who owned lobster-ships were the firms of Kjelland & Son and Planz & Sunt, in Stavanger, who became commissioners for English lobster-companies, which, in the latter half of the eighteenth century, gradually took possession of the lobster-trade, pushing the Dutch into the background. The privileges granted to Norwegian vessels greatly benefitted the commerce of Norway, which at that time could not compete with the more powerful commercial nations, in whose hands all our import and export trade had hitherto been; but the government, nevertheless, endeavored at times to encourage the export of the productions of the country in Norwegian vessels, and for the prosecution of the lobster-trade several further privileges were granted to Norwegian vessels, without however being of much benefit. Governor Holm therefore said toward the end of the last century, in his "*Forsög til Beskrivelse af Lister og Mandals Amter*," that "the lobster-fishery would be more profitable to the country if it became more common to carry it on in Norwegian ships instead of letting the

Dutch take it and reap the profits which Norway should enjoy." In 1753, the custom-house at Leervig was abandoned, and after that year lobsters were chiefly shipped from Espevær, a group of islands farther out at sea, where the richest fisheries were carried on. Formerly, as has been said, it was not allowed to fish or ship lobsters north of Leervig; but later lobsters were also allowed to be exported from the southern and northern Bergen districts, from which there had been constant complaints regarding this prohibition. The export, however, was not considerable north of the old lobster-ports; for, according to Olrik, only 52,000 were exported in 1757 from the outer ports in the Bergen custom-house district, the greater portion of which came from Søndfiordland. Of these, only 4,000 went to England in English ships, the remainder going to Holland. Toward the end of the eighteenth century, a great change took place in the lobster-trade, as, after the war which broke out between Holland and England in 1776, the Dutch lobster-trade was entirely ruined, the English taking possession of it.

The lobster-fisheries on the inner coast, where they formerly had been carried on almost exclusively, decreased very much, so that in the Stavanger district the shipping-ports of Stjernerö and Nordstrand were given up, as well as the outer port of Skudesnæs; and toward the end of the century the export of lobsters was chiefly carried on, besides from the old ports in the Lister and Mandal districts, from Tananger, Buken, and Akre, in the Stavanger district, and from Espevær, in the South Bergen district, to which afterward came the more northerly ports of Salthellern and Rognesund. These shipping-ports had been established through the exertions of a Bergen merchant, Mr. Wallace. He was commissioner for an English lobster-company, which controlled all the trade from Bómmeel to Nordfiord. Brandösund later took the place of Salthellern as a shipping-port.

In order to encourage lobster-fishing and the lobster-trade to foreign countries, considerable changes were made in the custom-house arrangements and the taxes to be paid for lobster-vessels. As it is of great importance during the lobster-season to get the lobsters to the shipping ports alive, every delay during the lading of the vessel, or every delay in the time of sailing, will occasion the death of many lobsters. Special custom house regulations had therefore to be made for the lobster-trade. Such a special regulation from the end of the last century is here given, omitting some unimportant points:

"Until further notice, it is allowed—

"1. That both foreign and Norwegian lobster-vessels, when taking lobsters in the ports of Salthellern and Espevær, may enter these ports without going up to the custom-house, or without obliging the shipper to go there with the papers of the ship, unless the ship has no certificate of its gauge, in which case it must obtain one from the authorities in Bergen.

"2. These ships are not required, either going out or coming in, to

call the custom-house officers on board in order to examine the ship and exact the taxes on the lobsters which compose the cargo. The officers, however, are at liberty to superintend the lading, if necessary.

"3. The lobster-commissioners of this firm (Wallace) must faithfully give an account of all the goods which the incoming ships may bring, and of the number of lobsters which are to be exported, so that the dues may be paid, and must also give the carrying capacity of the vessel.

"4. These ships are not exempt from the general custom-house supervision, but all the more, on account of the liberties accorded to them, does it become a duty of the officers to keep strict surveillance; and the revenue-cutters have also to see to it that nothing unlawful is going on.

"5. With regard to proving the correct calculation of the custom-dues, it is resolved that the commissioners, in every place where lobsters are caught, shall annually, when the fisheries cease, obtain from the fishermen the exact number of lobsters caught and the number of ships employed in the trade, with their carrying capacity. These data are communicated to the custom-house officers, and the dues are to be paid accordingly.

"6. Ships exporting lobsters from Rognesund are granted the same privileges, only with the difference that on coming into port they must come up to the custom-house, so that, consequently, the commissioner alone becomes responsible for the correctness of the list of the lobsters which have been exported.

"Given at the general custom-house office January 20, 1798."

The war between Holland and England injured the lobster-trade somewhat, but it soon recovered and rose to considerable dimensions, like our whale-trade, during the North American war which broke out in 1775. In Farsund, the flourishing firm of Joebum Birch Lund had in 1786 commenced to export lobsters in vessels of their own. Several years later, when the English attempted to get a foothold in their lobster-district and pay higher prices, they petitioned the government to order the fishermen to keep the conditions of the contract entered into by them till its time was up; but the government could in this case refer them to the law. In 1790, they petitioned to obtain the exclusive right to buy up all lobsters in the neighborhood of Farsund, agreeing to give the same price as others. They referred to their heavy expenses for fitting out vessels, and to all they had done to further the interests of Farsund, and maintained that their petition was in accordance with old privileges granted to the Norwegian lobster-trade. They obtained this exclusive right to buy lobsters on condition that this right should only be enforced till their ships had got their full cargoes, and that they should pay the same price as others. It was therefore not the same privilege which had been granted to Norwegian lobster-vessels more than half a century earlier, as these had only the right to let one of their vessels take its cargo before foreigners could get any lobsters. Some years later, they petitioned for the same privilege for all their vessels, even beyond Cape Lindesnæs. This, however, was not granted.

As the fisheries toward the end of the century declined very much, Mr. Gjertsen, a Mandal merchant, in 1790, proposed to the government that it should forbid the fishermen to catch lobsters from July 1 till the end of October, under a fine of \$25. He drew attention to the constant decrease in the number of lobsters, which he thought was solely owing to the fact that they were caught during the season when they spawned and shed their shell. Although he did not seem to know anything of Judge Lom's proposition of 1737, he had nevertheless arrived at the same result, viz, that, if the numbers of the lobster are not to be diminished, they must be protected during the season when they spawn and shed their shell. The government approved of this proposition quite as little as of Lom's, thinking that such a prohibition of the fisheries at a certain season would reduce the income of the fishermen too much, especially during poor years, and no one seems to have had an idea that such a protection of the lobster would prove extremely useful.

The European events from the beginning of the French revolution seem not to have had much influence on the lobster-trade, which was now in the hands of the greatest maritime power, England. Even their attack on Copenhagen in 1801 had only a temporary influence.

The export, which had decreased very much toward the end of the century, seems to have risen again somewhat during the first years of the new century, so that from 1804 to 1806 the annual average export was 345,000; 97,700 from the Bergen district, 174,300 from Stavanger and Egersund, 64,800 from the lobster-ports in the district of Lister and Mandal, and a number from the district of Arendal, where people had only begun to catch lobsters about this time. The increased number of lobsters exported was owing more to the establishment of new lobster-ports than to an increase of the number of lobsters in the old ones. On account of the small number caught toward the end of the century, the price of lobsters had risen, so that in 1804 about 2½ cents each were paid for lobsters caught in winter, and about 2 cents for those caught in summer. The fishermen were now placed in a very favorable position, and lobster-fishing was constantly extending beyond its old limits. The year 1807, however, had a decided influence on this fishery and the trade connected with it. After the attack of the English on Copenhagen and the consequent war, the export of lobsters ceased entirely, and they were only caught to supply the home market, and partly to be used as bait in the rich plaice fisheries, which at that time had been discovered near Stavanger. These years of war for the country were years of peace for the lobsters, and their number seems to have increased to such an extent that when the fisheries recommenced in 1815 they were taken in enormous quantities, not only inside but even outside of the baskets. The custom of the lobster-fishers getting from the traders not only brandy, as well as twine to tie the claws of the lobsters so they should not bite each other, but also clay pipes, which we find common in the beginning of the eighteenth century, is also spoken of in 1817 by

Oftedahl in his "*Efterretninger om Rennesö*," where he says "that a lot of clay pipes in a house is a sure sign that the inhabitants have been engaged in lobster-fishing." The price of lobsters was, according to him, in the same year only a cent apiece, as the fisheries were still very productive, but, nevertheless, the fishermen made a good living, the most fortunate ones selling annually in the parish of Skudesnaes lobsters to the amount of \$150 to \$175, (*Krogs Ækonomisk statistiske Efterretninger om Skudesnaes Praestegjaeld*, 1816, in the "*Budstikken*" for 1817;) and in the parish of Rennesö the average sum earned by each fisher in 1817 was, according to Oftedahl, \$166. From 1815 to 1818, 593,000 were on an average exported annually, so that the exports were greater than before the war, although the district was much smaller. On account of the low price of lobsters, caused by the rich fisheries, the exports rose still more, and English companies not only bought lobsters for their own country, but reshipped some of them to France.

The number of lobsters exported in 1821 and 1822 amounted to over a million a year, and increased still more during the following years, although it was not so large in 1823 and 1824 on account of the unfavorable weather. From 1825 to 1830, the average number of lobsters exported annually was 1,268,000, and in 1827 and 1828 the highest number was reached, viz, 1,500,000. These large numbers, however, were caused not so much by the fisheries being just as productive or more so in the old lobster-stations, but by the circumstance that new English companies, seeing the great profit to be derived from this trade, commenced to export lobsters from places from which they never had been exported before. Thus lobsters began to be exported in 1828 from the district of Tönsberg, and from Söndwör in 1826, and during the two following years from Molde and Christianssund. The exports from Stavanger and Egersund meanwhile decreased very much, having been reduced to 67,000 per annum in the latter place in 1827 when the exports from the whole of Norway amounted to 1,429,703. After 1830, the exports began to decrease even in the new districts, so that the annual average quantity of lobsters exported during the five years 1831-'35 was only 640,000. The only places that kept the lobster-trade alive were the new districts, while all the old ones decreased rapidly, some of them to such a degree that according to the governors' reports the lobster-trade must be considered almost extinct in 1835.

All this export-trade was carried on by English vessels, except at Farsund, from which Mr. Hans G. Lund shipped twenty-four cargoes in 1819, twenty-four in 1821, sixteen in 1824, and twelve in 1825, each of them consisting of 4,000 lobsters, partly to London and partly to Holland.

When the attention of the fishermen was directed to this decrease of the lobsters in the old districts, people began to be afraid that the poor fishermen would entirely lose this means of earning a living; and it was supposed that the decrease was chiefly due to the fisheries being

carried on during the spawning-season of the lobster. In 1830, Mr. T. Lundsgaard, member of the Storting, (Norwegian Parliament,) therefore made the motion to pass a law forbidding the catching or exporting of lobsters from June 15 till October 1. The committee which had this matter in charge proposed that the motion should be laid on the table, because Mr. Lundsgaard had not produced any information which might enable the committee to judge with certainty to what extent this dreaded decrease of the fisheries really existed, and whether the evil could be remedied by the measures that were proposed. The committee likewise thought that such a measure would be too great an encroachment on the rights of many places on the coast, taking away from these regions their only source of income. The government, however thought, that the matter was of great importance; and as the report of the committee showed that only want of information had prevented any action being taken, it requested those districts in which the lobster-fisheries were carried on to have the matter examined by the local officers and other competent men, and to send in a report, stating whether it would be useful to pass a law on the subject; and, if so, to state the objections to Mr. Lundsgaard's proposition. All the reports which reached the government in answer to this request agreed that the lobsters had decreased in size, but some supposed that the great masses of spring-herring coming near the coast might have had an influence on it, or that this decrease in the size of the lobster might be caused by their young ones being disturbed by the cutting of sea-weeds for manure; others advised not to pass any law against exporting lobsters from June 15 till October 1, fearing that the exports to England might thereby be hindered, as the companies would naturally not consider the lobster-trade profitable unless it was steady; and the fishermen would lose their income during the time when exportation was forbidden, or they would evade the law, continuing to fish and keeping the lobsters till exportation was again permitted. Others again raised objections based on their knowledge of the natural history of the lobster, considering it doubtful whether the lobster spawned and shed its shell during the time indicated, and even if it were the case, that the time was too long. Reports from other districts, such as Stavanger, said that such a law was unnecessary, as no fishing was, anyway, going on during that time. These objections to such a protective law could not have much influence, especially those founded on the natural history of the lobster, for they could not be proved. But even the fear of an entire stoppage of the lobster-trade would be causeless, as such an event would be much more injurious to England, whose inhabitants had accustomed themselves to this luxury, than to Norway, which received but little money for her lobsters. From other sides it was said, in favor of the law, that such a protection would be useful, as the lobster very easily dies during the season when it spawns and sheds its shell, although this season is not the same everywhere. Those who

might suffer from limiting the fishing-season would be fully compensated for this by the greater number of lobsters that would be taken during the season when fishing was permitted; and the fishermen should, at any rate, during summer devote their attention more to working their little farms and to the herring-fisheries. The government found that the whole matter was not yet sufficiently clear to say with certainty whether such a prohibition of lobster-fishing during the season when the lobster spawns and sheds its shell would prove generally useful. The districts where lobster-fishing was carried on were therefore requested to have those fisheries thoroughly examined for several years by competent men, and then again send in reports as to whether such a prohibition would be useful. It was likewise requested that an opinion should be given regarding a proposition made by some people in the district of Nordernees and Raabygdalen, to divide the coast into small districts, where lobster-fishing should be alternately protected, so that if a district had enjoyed the privilege of fishing for three years, fishing should there be forbidden during the three following years. The reports coming in in answer to this request contained a very extensive prohibitory law, recommended by the above-mentioned district, suggesting that fishing should be prohibited from March 1 till October 1, and advising that no lobsters measuring less than 8 inches should be caught; the length of time when fishing was to be prohibited should be three years in each district. Another district only wanted to have fishing prohibited from July 1 to November 1, but was not in favor of alternating the time between the districts. The Stavanger district reported that as fishing was going on there only in April, May, and June, no law would be required, and none would be desirable, especially if it were to forbid fishing during the month of June, when the weather was favorable and the fishermen had most time for it. The lobster did not spawn on that coast till August and September. It was also thought that the number of lobsters had not diminished, but that they now stayed deeper in the water, finding enough food in the roe left by the herrings; alternating protection was not thought advisable. The report from the South Bergen district was essentially the same; and the Romsdal report said that lobsters were only caught from the end of May till the end of July. As there were, moreover, many different opinions regarding the time when the lobster spawns and sheds its shell, the government resolved to get the opinion of scientists on this point, and requested Professor Rathke, Professor C. Boeck, and Professor Sars (at that time a clergyman) to make a report on the nature of the lobster. Professor Rathke in his report said that in his opinion the pairing-season of the lobster was over before midsummer, and that the shedding of the shell took place later, but he thought at the same time that the mass of lobsters that came near the coast during the spawning-season was so large that the comparatively inconsiderable number that were caught would scarcely be noticed; he also thought that it would be so difficult to enforce the law that it would be more injurious than useful. Professor

Sars thought that a thorough investigation of the spawning-process of the lobster would be the only safe basis for any law; but this process was still very much enveloped in obscurity. He supposed, however, that fishing could be carried on till the eggs came out of the ovary, and were fastened under the tail, which took place in June, and fishing should consequently be prohibited from June 1 till September 15. He did not think that the number of lobsters had decreased, but that it only seemed so, because nowadays more people were engaged in fishing, and fewer lobsters consequently fell to the share of each fisherman. He thought, however, that the lobsters had diminished in size. In a later report, he expressed his opinion that lobster-fishing should be prohibited from June till the middle of September. Prof. C. Boeck gave in his report, in the first place, a description of the lobster's mode of life, and a criticism of the reports on the condition of the lobster-fisheries, sent by the governor. He showed from statistics that a decrease in the number of lobsters was both possible and probable on account of the increased fisheries during the past years. The lobster is a coast-animal, and only stays where it can easily get a sufficient supply of food, therefore near the coast, and only as far from it as sea-weeds are found, between which it finds the animals that constitute its food. Even if it wanders about, it does not go far, going, *e. g.*, in winter into a greater depth, and during summer into the shallow water near the coast. It then swims about on the surface of the water, but never goes very far, its structure not being adapted for longer journeys. The fact of the matter is, therefore, that a certain number of lobsters belong to a certain extent of coast, which, by propagating freely, may increase if they have sufficient food, or decrease from a natural mortality or too much fishing; and in this latter case the losses cannot easily be made up by lobsters coming in from the adjoining districts. There can, consequently, be no doubt that the lobster can, on a given stretch of coast, be exterminated by continued persecutions, or its number, at least, be diminished to such a degree as to make lobster-fishing unprofitable. Such an event would occur all the sooner if the coast in question be not favorable to its increase. From the reports which had come in, it seemed that certain places were less favorable to their propagation, or possible immigration from adjoining districts, than others, and from such districts the complaints concerning the decrease in the number of lobsters had come. In other places, the bottom of the sea along the coast was a convenient place of sojourn for the lobsters, and the number caught was but a small part of those that lived and were born there. In such places, the fisheries would be productive and steady. But even there, continued exhaustive fishing would diminish their number, especially if there should be an unfavorable year for the growth and development of the lobster. Prof. C. Boeck considered it, therefore, not only desirable, but even necessary for the even maintenance of the fisheries, that there should be certain limitations, so that lobsters should not be caught to such a



degree as to make an entire stoppage of the fisheries for a period of time necessary. He believed that the proposed law, in obedience to which lobsters should only be caught at certain seasons of the year, would not fully answer the purpose, especially as no fishing was going on during the proposed time of prohibition in those districts from which there were the loudest complaints of the decrease of the lobsters. He thought, on the other hand, that a law prescribing that only lobsters of a given minimum size should be exported and sold would keep the fisheries in an even condition. Regarding the size of the lobsters that were to be offered for sale, sold, and exported, he thought, that even if it could not be definitely settled at what age and what size a lobster was capable of spawning, it could to some extent be ascertained from an analogical comparison with the river-crawfish. This is supposed to be sexually fully developed in its third year, when it is 4 inches long, but it may attain an age of twenty years and a length of 6 inches. He therefore supposed that the lobster becomes capable of spawning when it is three years old and has reached a length of about 8 inches, while lobsters measuring less are seldom found to have any roe. In order, therefore, that the lobster before being caught may not only reach the size when it may be considered fully grown, but might also be supposed to have contributed something toward the propagation of the species, a minimum size of a little more than 8 inches should be agreed upon for lobsters which might be caught and exported. Possibly 8 inches might be sufficient, as the English generally do not buy any from the fishermen as "full men" which do not have this size.

In consequence of this report, the ministry petitioned His Majesty to recommend to the next Storting the passage of a law forbidding the offer for sale and the sale of lobsters that did not measure 8 inches in length, inclusive of the head and tail.

The following royal proposition for a law limiting lobster-fishing was thereupon published November 5, 1838:

"We Carl Johan, &c., make known, &c.:

"§ 1. That it shall be forbidden in this kingdom to offer for sale or sell lobsters which do not have a minimum length of 8 inches, inclusive of the head and tail. For every lobster offered for sale or sold which shall not have this length, a fine of 24 cents shall be paid, half of which shall go to the police or custom-house officer, or any other person denouncing the offender, and the other half to the poor. All cases of this kind are to be brought before the police courts.

"§ 2. Lobsters which do not have the above-mentioned length shall not be exported."

The Storting committee which had to consider this matter hesitated to recommend to the Storting the passage of this law, basing their objections on several reports from the lobster-districts and on Professor Rathke's report. Their chief objection, however, was that the fishermen would consider such a law as limiting their liberty, and, not being

able to understand its utility, would thereby only be encouraged to follow the dictates of selfishness and transgress the law. It was, moreover, thought that it would be difficult to exercise any sufficient control, and that the trade would be injured thereby. The law was therefore not passed. This was the fourth time that a moderate proposition had been made to protect the lobster in order to avoid the total ruin of the fisheries. In the *first* proposal, by Judge Lom, it had been suggested that the lobster should be protected at certain seasons of the year, when it spawns or sheds its shell, and likewise that those lobsters should be protected that had not reached a certain length. In the *second*, by Mr. Gjertsen, only a certain annual season of protection was suggested; as was also done in the *third*, by Mr. Lundsgaard. The *fourth*, or government proposal, only suggested that lobsters below a certain size should not be caught.

It was not long before there were again numerous complaints of the decrease in the number of lobsters, which, according to the testimony of impartial men, was owing to lobsters being caught at a time when they spawn and shed their shell. Before anything further was done in the matter, a fishery-commission that had been appointed made a proposal regarding the lobster-fisheries, which must be mentioned here. In 1840, the government appointed a commission to revise the fishery-laws. The following were members of this commission: Judge Landmark, Consul Meltzer, Messrs. Tangen and Moses, merchants, Rev. (now Professor) Sars, and Chief Pilot Monsen. One passage of the law proposed by this commission reads as follows: "On their own property, as far as ten fathoms from the coast at low water, the owners shall have the exclusive privilege to catch all small fish, lobsters, and oysters, but any one may catch lobsters outside of unimproved land bounding the sea without regard to the distance from the coast."

In this proposition, which, however, never became a law, the old idea is revived that the lobster-fisheries, properly speaking, belong to the land-owners, which, in spite of the decree of 1728, had formed the subject of discussion all through the last century. Even if this proposition had become a law, it would not have exercised any great influence on the lobster-fisheries, which are almost exclusively carried on along unimproved coasts which can scarcely ever be subjected to cultivation. No new law regarding the protection of lobsters was introduced in the next Storting, but in 1845, when the Storting had assembled, the department of finance and customs received a letter from the agent of the English lobster-company in Stavanger that another English company intended to continue the lobster-fisheries, which, in that district, usually cease toward the end of June, during July, August, and September, hoping thereby to gain over the lobster-fisheries, and thus to destroy the trade of the other company. As this agent was afraid that fishing during these months would ruin the lobster-fisheries in this district for several years to come, he urged the department to introduce

the royal proposition of a law in the Storthing, forbidding lobster-fishing from June 15 to October 15. The department requested the governor to give his opinion on the subject. He stated, as he had done on a former occasion, that such a law would be unnecessary, as the lobster is not fit to eat during those months, and none could therefore be exported. During this and the following years lobsters were, nevertheless, caught and exported during those months, as the two companies vied with each other, each endeavoring to secure the trade. The price of lobsters rose considerably, and all those that were caught were bought up, even during the season when they spawn and shed their shell, although every one saw what injury was being done, and although the mortality among the lobsters was great, and the consequent loss considerable. All this soon bore its fruit, but few lobsters being caught in 1847 in those places where in 1845 fishing had been going on till the end of August, while the fisheries were productive in those places where they had ceased in July. All were now agreed that it was injurious to catch lobsters during the season of the year when they spawn and shed their shell, which, in the districts in question, was supposed to take place in August and September, and it became evident that such continued fishing would in a short time drive the lobsters entirely from the coast. To prevent such a misfortune, the governor at last resolved to request the department to issue a provisional regulation, forbidding lobster-fishing during the months of August and September. The department, however, again considered it necessary to get reports from the lobster-districts and from the agents of the English lobster-companies. Some of these reports declared that lobster-fishing should be forbidden from the middle of July till the middle of October; others that there should be no fishing during August and September. The agent of an English lobster-company in Jarlsberg and Laurvig, however, advised against any prohibition of the lobster-fisheries, saying that such a prohibition during the summer months would cause the English lobster-companies to stop this trade, ice hindering the fisheries in winter and spring, and storms those in the latter part of autumn, so that the fisheries commenced gradually in May and lasted till the end of September. They are most productive in July, August, and September. The decrease of the lobster-fisheries he ascribed not to the summer fisheries, which were said to diminish the number of lobsters, but to the circumstance that the people of the district devote their attention more to the profitable mackerel-fisheries. The governor was of the same opinion. A totally different opinion, however, was entertained by other competent and trustworthy persons in Laurvig and the neighborhood, who, from information obtained of the lobster-fishers of that district, judged that such a prohibition of fishing from the middle of July till the middle or end of September would have a favorable influence on the preservation of the lobsters. The governor of the Lister and Mandal districts showed in his report by examples from the years of war, that the more the lob-



He had found, moreover, that the lobster was capable of propagating before it had reached a length of 8 inches. He would therefore propose—

“§ 1. His Majesty may take measures for protecting the lobsters during a continuous period of two to three months annually in every district of the kingdom, at the request of the respective governors.

“§ 2. The season of protection shall in every case embrace the whole month of August.

“§ 3. The protection may extend both to males and females, or only to the latter.

“§ 4. Whoever catches lobsters, or offers them for sale, during the close season, in the district or districts where there is such a law, shall pay a fine of 24 cents for every lobster which is caught or offered for sale contrary to the law.

“§ 5. In the district or districts where protection extends only to the female lobsters, a fine of 24 cents apiece shall be paid by every one who, during the season of protection, allows female lobsters to be caught and offered for sale, or in any way trades in such.

“§ 6. The same fine shall be imposed on lobster-dealers or their agents if they receive and ship lobsters caught during the close season, in accordance with the law in force in the district in which the lobster-station is located.

“§ 7. The sums realized by these fines go half to the person who denounces the transgressor, and the other half to the poor-fund of the respective district. All such cases must be brought before the police court.”

Professor Rasch has given his reasons for the provisions of the above law as follows:

“Although there are frequent complaints that general game and fishing laws are not suited to all the districts of this large country, where the different degrees of latitude and local circumstances produce great differences with regard to the pairing-season, the periodical arrival, &c., of the same races of animals, he had in most cases found fewer differences than one in general might be led to suppose. He proposed § 1 so that every district should have the season of protection best suited to its circumstances.”

Regarding § 2 he says:

“As in his opinion it seemed sufficiently proved that the most prolific hatching-season occurs in the month of August, even in the most northerly portions of the country, where lobster-fishing is carried on, he thought that, in all cases, this month should be included in the season of protection.”

Regarding § 3, he thought that the strictness of the protection might be relaxed a little in those districts where the summer fisheries, on account of peculiar circumstances, cannot be entirely stopped without immediate loss to the poor coast-population. He thought, moreover,

that by protecting only the female lobsters the purpose of the law with regard to the preservation of the species will be just as fully answered as by protecting both sexes during the same period of time. The objection may be raised that it will be difficult to distinguish between a female without outside roe and a male; but the difference of sex is so great that a fisherman may be able to tell it at the first glance. Nor would he only protect those lobsters which have outside roe, as this may easily be scraped off. Irregularities of the normal sexual relations will be of very little importance, as most of the females which have been protected will be caught by the fishermen when the season of protection is over, as they go but a short distance from the place where they stay. The objection made to the law that it would force the fishermen to return the products of the sea to it, he considers to be of great importance; but he hoped that they would see what a great risk they ran by unlawful fishing, and be convinced that protection will in the long run benefit their trade.

From the above it will be seen that, with the exception of the governors of Jarlsberg and Laurvig and two of the lobster-agents, all local authorities and competent men were in favor of the opinion that the decrease in the number of lobsters noticed during the last few years had been caused by too extensive fishing during that part of summer when the lobster spawns, and had considered a law prohibiting lobster-fishing during a certain period of summer and autumn as the only effective means of protecting this important animal. But others, we see, wished to have the protection extended from June or May till October; others only from July to September; and others, again, only to August and September. Both in Sweden and Heligoland there are laws prohibiting the catching and selling of lobsters from July 1 till September 15, and in Scotland it is forbidden, under a penalty of £5 each, to catch lobsters from June 1 till September 1; and in England no lobster is allowed to be sold which measures less than 8 inches. The government also considered that protection during the season of the year when the hatching is chiefly going on would answer the purpose, and that it could be more easily maintained than a law prohibiting the fishing and selling of lobsters below a certain size. As the young are chiefly hatched during the month of August, but also during July and September, the government thought that August should be included in every close season, while it should be left to the local authorities, with royal approbation, to extend this legal season of protection to July and September, in accordance with the local circumstances of every district. By adopting these measures, the trade would not be restricted to any serious extent. This was also granted by the commissioners of the English lobster-companies, and, as far as the fishermen are affected, they can easily find work in nearly every part of the kingdom during August, while, on the other hand, the protection of lobsters during a certain period will make the fisheries all the more productive during the months

when fishing is allowed. With regard to the other objections to limiting the fisheries during the summer months, viz, that in the districts of Romsdal, Jarlsberg, and Laurvig they are only carried on from the beginning of spring or summer till some time in fall, the government remarked that this could scarcely be caused by any special arrangements of the lobsters on these parts of the coast, but is a natural consequence of the circumstance that the fishermen in the district of Romsdal during spring and autumn are employed in the great fisheries, while in the districts of Jarlsberg and Laurvig this is caused by the natural hinderances of ice and storms during spring and autumn. But especially in these districts a law prohibiting fishing during the month of August could not limit this trade very much, compared with the beneficial consequences which such a law would have. The government thought that the prohibition should extend both to male and female lobsters, which opinion was finally also shared by Rasch. The government also proposed that the law forbidding the export of lobsters should extend the time when export was not allowed eight days beyond the end of the close season, so as to enable the fishermen to fish up to the very commencement of the close season.

On January 26, 1848, the king signed the following proposition for a law for the protection of lobsters, to be laid before the Storting during its next session :

“ We, Oscar, &c., make known :

“ For some time complaints have been made that the number of lobsters on the coasts of the kingdom has decreased considerably, especially since the year 1830. Competent men have been consulted as to the possible causes of this phenomenon, as likewise as to the means by which the lobster might be preserved, and a royal proposition for a law forbidding the catching or export of lobsters measuring less than 8 inches in length was laid before the Storting, but was not passed. Renewed complaints of the great decrease in the number of lobsters have recently come from several parts of the country, petitions have been sent in asking that the catching of lobsters at certain seasons of the year might be forbidden, and from the information received on this point it has been considered absolutely necessary, for the preservation of the lobster, to fix by law a certain season of protection for this marine animal.

“ His Majesty would therefore invite the attention of the Storting of the kingdom of Norway to this subject, and ask them to pass a law regarding the protection of lobsters, in accordance with the accompanying draft :

“ DRAFT OF A LAW REGARDING THE PROTECTION OF LOBSTERS.

“ 1. It shall be forbidden to catch or sell lobsters during the month of August.

"2. In accordance with a request made by the respective local authorities, the above-mentioned period may be extended in the different districts by the king, but it shall in no place last longer than from July 1 to September 30.

"3. The fishing or selling of lobsters during a period when it is forbidden in accordance with § 1 and 2 is punished with a fine of 24 cents for every lobster caught or offered for sale contrary to law.

"4. All cases arising from transgressions of the regulations contained in § 1 and 2 must be brought before the police courts. If any one is accused of such transgression, the chief of police in the district shall get his declaration whether he is willing to pay the fines. If he is willing and does not possess the necessary amount of money, it shall be levied on his property. If, on the other hand, the accused denies his guilt, or refuses to pay, the above-mentioned officer shall have the matter investigated and settled. The fines shall be divided between the informer and the local poor-fund.

"5. During the period when in accordance with § 1 and 2 it is forbidden to catch or offer for sale lobsters, as well as during eight days following the end of this period, it shall likewise be forbidden to ship lobsters to foreign parts. Attempted or actual transgression of this article shall be punished in the same manner as provided in the law of September 20, 1845, regarding attempted or actual smuggling.

"6. This law shall take effect January 1, 1849."

In the committee to which the royal proposition was assigned for consideration, the first two articles were changed, so as to make the season of protection stricter. In the royal proposition, the local authorities could under special circumstances propose that the season of protection be extended to the months before and after August; but the committee were of the opinion that the law should be enforced during a longer period, but in special cases the local authorities might propose that it should be limited to the month of August, to such a degree had public opinion changed in favor of such a protective law.

When the matter was discussed in the Storting April 29, 1848, not a voice was raised against a protective law, but the discussion was chiefly as to whether the law should be adopted in its stricter form as recommended by the committee, or as proposed by the government. The law was finally adopted in the form recommended by the committee, modified by an amendment that the season of protection should last from July 15 till the end of September. The first portion of § 5 was also changed so as to read as follows: "Eight days after the beginning of the period during which in accordance with § 1 and 2 it is forbidden to catch lobsters or offer them for sale till eight days after the end of this period, it shall be likewise forbidden to ship lobsters to foreign parts." As for the rest, the law was passed in the shape recommended by the committee; a motion to change the above-mentioned eight days to twelve days or



three weeks being lost, as likewise another motion that the law should not come in force till January 1, 1850.

The law, which was adopted in the same shape by both houses of the Storting, and was sanctioned by the king, came to read as follows:

"1. It shall be forbidden to catch or offer for sale lobsters during the period from July 15 till the end of September.

"2. In accordance with a request from the respective local authorities, this period may be limited in different districts by the king; but the season of prohibition must in every case embrace the whole month of August."

3 and 4 are entirely as in the royal proposition.

"5. From eight days after the beginning of the period during which, in accordance with 1 and 2, it is forbidden to catch lobsters or offer them for sale, till eight days after the end of this period, it shall likewise be forbidden to export lobsters to foreign parts.

"6. This law shall come into force January 1, 1849."

By this law, which forbids all fishing during two and a half months, the yield of the fisheries was of course somewhat diminished during the first years following its passage, till the protected young could reach the necessary size. Thus fewer were exported in 1849 and 1850 than during the preceding years, so that, while from 1846 to 1848 about 600,000 were exported, the number had sunk to 408,310 in 1849 and 427,600 in 1850. This decrease, however, is not merely owing to the circumstance, that the number which were usually caught during the close months remained in the sea, but likewise to the fact that the English joint-stock company which carried on the exportation from the districts of Jarlsberg and Laurvig began to pay a lower price for the lobsters, so that the fishermen resolved no longer to catch any even during those months when they were permitted to do so. While from this district there were from 1846 to 1848 on an average about 26,000 exported every year, only 7,960 were exported in 1849, 1,664 in 1850, and none at all during the following years; but, in 1855, 14,470 were again exported, chiefly to Copenhagen. Since 1850, the lobster-trade has steadily increased, and the governors, in their quinquennial reports on the economical condition of their respective districts, state that protection seems to have produced this result.

In the district of Stavanger, the exports rose, from 1850, when they amounted to 120,653, to 204,803 in 1854; in the South Bergen district, it is also stated that the fisheries have increased. Of the following years, the least productive was 1858, when the exports from the whole kingdom only amounted to 553,238, on account of unfavorable weather during the whole fishing-season; but, in 1860, the number had again risen to 1,333,037, and kept tolerably steady during the following years, so that the exports during these years were about the same as during the years 1825-'30, when they were at their highest, only to decrease very rapidly during the following years. In 1860, the exports rose to

1,000,000, and increased constantly, till in 1865 they very nearly reached 2,000,000, viz, 1,956,276.

The complaints regarding the protective law have now ceased, since the government has in several districts limited it by royal decrees, and in many places the people are rather inclined to extend the season of protection than to limit it as, in the district of Stavanger, where two years ago public opinion was in favor of prohibiting all fishing during autumn and winter, as it was thought that thereby the spring and summer fisheries would become all the more productive. As a general rule, no lobsters are exported from there in autumn and winter, except when some new English companies want to get into the lobster-trade and therefore buy the lobsters at a higher price than is usually paid, so as to ruin their rivals. Then all the lobsters that can be got are generally bought during autumn, as was the case in 1845 and 1846, and to some extent in 1864 and 1865. During the last-mentioned year, such a large quantity of lobsters was caught on account of the unusually calm weather, that the Englishman who had urged the fishermen to fish could not take more than one-third of all that had been caught, and the rest died, without being of use to any one. One reason why the fishermen wish to see this autumn fishing forbidden by law is that even if they were unanimous as to its injurious character, all of them would, though unwillingly, take their part in it, if a small number of fishermen moved by covetousness were to catch lobsters, and if there should be a chance of selling them at that season, because they suppose that those lobsters which they would otherwise get in spring would now be caught by others in autumn, which would injure their trade very much.

As the privileges which at different times had been granted to the lobster-shippers were not the same in every place, because the ports for shipping lobsters were established as necessity arose, and on that occasion got certain privileges, these must naturally differ a great deal according to the views prevalent at the time when the ports were established. Such regulations regarding the ports of Espevaer, Salt-hellern, and Rognesund from the year 1798, have already been communicated, and similar ones have existed in other ports. These regulations were certainly modified a great deal in course of time; but the Danish-Norwegian government inclined to keep privileges that had once been granted unchanged as far as was possible, and these privileges could consequently not become uniform till our days. In order to do this, the department of finance and customs issued a circular, dated December 11, 1865, to the following effect:

“As the privileges which have been granted by decrees published from time to time to the lobster-trade in different places of the kingdom partly differ somewhat as to their character without there being sufficient reason therefor, and are partly scattered in a manner which makes supervision difficult, the department has thought proper to make the following general regulations regarding the privileges that shall be in

force with regard to this trade, and which, with the exception of the additional regulation regarding the calculation of ship-dues, agree entirely with those which are for the time being in force in most of the custom-stations on the southern coast :

“1. Arriving lobster-vessels which intend to take lobsters in an outer port, if they do not contain any goods subject to duty, but only ballast, may be exempt from stopping at the custom-house to which the outer port belongs, if the shipper immediately on his arrival reports himself to the custom-house officer who may be stationed at that place, but if there is no such custom-station there, at the nearest custom-station, where the custom-house officers may examine the vessel.

“2. Such vessels as have arrived in the outer port are exempt from making their declaration at the custom-house before they commence to take their cargo of lobsters; but, when they commence, they shall be obliged to mention the exact number of lobsters which they intend to export.

“3. Such vessels are permitted to make their declaration before the custom-house at the same time with giving the quantity of lobsters about to be exported.

“4. Such vessels, after having thus obtained their custom-house papers for a certain quantity of lobsters, if they cannot get the quantity mentioned in the port where they take their cargo, may take the lobsters that are wanting to make up the quantity mentioned in the papers, in another port, either in the same custom-house district or in another. The following, however, must be observed :

“*a.* The custom-house officer stationed in the port shall mention in the papers the exact number of lobsters that have been taken there, and the custom-house officers in the port or ports which may be entered afterward shall examine in how far the number of lobsters received agrees with the number of lobsters specified in the papers.

“*b.* If the lobsters are shipped in places where there is no custom-house, the company's commissioner, or, if there is none, the person who sorts the lobsters, may mention in the papers what number of lobsters have been taken, whereupon the vessel may sail; but a copy of the papers made under oath must immediately be sent to the nearest custom-house.

“*c.* The respective custom-house officer thereupon shall, in the case mentioned under *a*, send a report regarding the insertion in the papers to the custom-house to which he belongs, and shall, in the cases mentioned under *b*, send the declaration of the persons who sorted the lobsters.

“*d.* If the lading is completed in a district belonging to another custom-house than the one where the lobster-vessel has commenced to lade, the reports and declarations mentioned under *b* and *c* shall be immediately sent by the custom-house where they have been received to that custom-house where the lading has commenced, so that the officers belonging to the latter may be able to determine in how far the

exports from all the ports correspond with the number of lobsters for which duty has been paid. It is of course understood that the above-mentioned reports and declarations must give the name of the vessel and its captain, as well as the number and date of the custom-house passport, and state by which custom-house the latter has been issued.

"5. If the captains of lobster-vessels find occasion to take a larger number of lobsters than is mentioned in their papers, either in the same port or other ports, this may be done without any hinderance by the custom-house officers, and in this case everything regarding the insertion in the papers and the reports and declarations that are to be given is to be done exactly as mentioned in No. 4. This is done, however, under the condition that the shipper immediately pays the export-dues for the extra number of lobsters taken, and that the custom-house officer in the above-mentioned reports and declarations certifies that the vessel has exported this extra number. In so far, however, as an arriving lobster-vessel brings goods which have to pay duty, the regulations mentioned in Nos. 1 and 2, without regard to the quality and quantity of the goods, cannot be applied to the vessel, but it must first get the required permit to pass in, and therefore go up to the custom-house, and there undergo the same treatment as other arriving vessels, whereupon it may proceed to the place of lading. If it is found that exporters, sorters, or shippers do not observe the conditions under which the above-mentioned privileges have been given, these shall be revoked, according to circumstances, either for a vessel, for a port, or for a certain part of the coast. The custom-house officers shall see to it, as far as circumstances and the above-mentioned regulations allow, that no abuses creep in, and that if there should be any, they are immediately made known to the respective authorities.

With regard to the ship-dues of such vessels as take in cargoes of lobsters outside the custom-houses, in conformity with the privileges granted to them, it has been found convenient, in order to have a uniform mode of proceeding, to calculate their dues in future always as of vessels whose cargo exceeds one-fourth of the carrying capacity."